LIBRARY OF PRINCETON
NOV 11 1938
THEOLOGICAL SEMINARY

LB7
.K95

A PHILOSOPHY OF EDUCATION

TITLES IN THE PRENTICE-HALL EDUCATION SERIES

E. GEORGE PAYNE, EDITOR

A PHILOSOPHY OF EDUCATION, *by* Quincy A. Kuehner

DEVELOPMENT OF MODERN EDUCATION, *by* Frederick Eby *and* Charles Flinn Arrowood

EXPERIMENTAL PEDAGOGY, *by* W. A. Lay; *trans. by* Adolf Weil *and* Emanuel K. Schwartz; *with an introduction by* Paul R. Radosavljevich

MANAGEMENT AND TEACHING TECHNIQUE IN THE ELEMENTARY SCHOOL, *by* George A. Retan

MODERN EUROPEAN EDUCATORS, *by* Adolph E. Meyer

PROBLEMS IN TEACHER-TRAINING, *edited by* Alonzo F. Myers

SCIENCE IN THE NEW EDUCATION, *by* S. R. Slavson *and* Robert K. Speer

SOCIAL STUDIES INSTRUCTION IN THE SECONDARY SCHOOLS, *by* Robert E. Swindler

SPEECH CORRECTION ON THE CONTRACT PLAN, *by* Ruth B. Manser

SPEECH FOR THE CLASSROOM TEACHER, *by* Dorothy I. Mulgrave

TEACHING SPEECH IN SECONDARY SCHOOLS, *by* Letitia Raubicheck

THE EDUCATION OF THE NEGRO IN THE AMERICAN SOCIAL ORDER, *by* Horace Mann Bond

THE MENACE OF NARCOTIC DRUGS, *by* E. George Payne

LIBRARY OF PRINCETON
NOV 11 1938
THEOLOGICAL SEMINARY

A
PHILOSOPHY OF EDUCATION

Based on Sources

by

QUINCY A. KUEHNER, M.A., Ph.D.

Professor of Education, Teachers College
Temple University

New York
PRENTICE-HALL, Inc.
1936

COPYRIGHT, 1935, BY
PRENTICE-HALL, INC.

ALL RIGHTS RESERVED. NO PART OF THIS BOOK MAY BE REPRODUCED IN ANY FORM, BY MIMEOGRAPH OR ANY OTHER MEANS, WITHOUT PERMISSION IN WRITING FROM THE PUBLISHERS

First Printing . . . October, 1935
Second Printing . . . April, 1936

PRINTED IN THE UNITED STATES OF AMERICA

TO MY STUDENTS PAST AND PRESENT
—MORE THAN TEN THOUSAND—
THIS VOLUME IS GRATEFULLY INSCRIBED

Preface

THIS book is an outcome of a number of years' experience on the part of the author as teacher of a major course in the philosophy of education. Its purpose is to make available for class use and discussion a certain amount of basic material in connection with each of the topics listed in the table of contents. The material selected represents, on the whole, the point of view held by the author and presented to his classes. But the selection of quotations has not been confined to this point of view. In the body of each chapter will be found opposing views and positions which the student should carefully consider.

The chapters are arranged logically, not necessarily in the order of learning. Chapters I-V define education and philosophy and call attention to several typical philosophies of education; Chapters VI and VII raise the question as to the goal of education; Chapters VIII-XI deal with the fundamental factors in the educative process; Chapters XII-XVIII are concerned with means of education; Chapter XIX deals with the measurement of progress in education; and Chapters XX-XXIII are related to the purpose of the educative process as a whole.

At the beginning of each chapter is a brief introductory statement. These statements are intended primarily to orient the student in relation to the purpose and significance of the material presented. Also, they serve to outline, in more or less definite fashion, a philosophy of education, and so justify the title given to the book.

For courteous permission to use copyrighted material the writer hereby expresses his appreciation and extends his thanks to the following:

Abingdon Press; R. G. Adams & Company; The Christian Advocate; George Allen & Unwin; American Book Company; D. Appleton-Century Company; Richard G. Badger; A. & C. Black; Bobbs-Merrill Company; Cambridge University Press; The Children's Foundation; Child Study; Cokesbury Press; Columbia University Press; Congregational Publishing Society; Thomas Y. Crowell Company; Doubleday, Doran & Company; E. P. Dutton & Company; Ginn and Company; Harcourt, Brace and Company; Harper & Brothers; Harvard University Press; D. C. Heath & Company; Henry Holt and Company; Houghton Mifflin Company; International Council of Religious Education; Jackson, Son & Co.; Journal of Education; Journal of Educational Research; J. B. Lippincott Company; Longmans, Green & Company; The Macmillan Company; Andrew Melrose Ltd.; N.E.A. Department of Superintendence; National Society for the Study of Education; W. W. Norton & Company; Oxford University Press; Princeton University Press; Progressive Education Association; Public School Publishing Company; G. P. Putnam's Sons; Rand McNally & Company; Religious Education Association; Fleming H. Revell Company; The Ronald Press Company; Round Table Press; Row, Peterson & Company; W. B. Saunders Company; Science Press; Scott, Foresman and Company; Charles Scribner's Sons; Silver, Burdett and Company; Simon & Schuster; Teachers College, Columbia University; University of Chicago Press; University of Chicago, Department of Education; Warwick & York; Williams & Wilkins Company; The John C. Winston Company; World Book Company; Yale University Press; Edward L. Thorndike; Mrs. Woodrow Wilson; A. Duncan Yocum; Charles W. Heathcote; and Orchard Hill Press.

It is a pleasure to acknowledge the uniform courtesy of the authors, from whose works extensive quotations were made, in granting permission for the use of their material. To these and to all others whose writings are represented in the book my thanks are hereby extended. I have drawn most freely on the works of Herman Harrell Horne; to him I am especially indebted.

Pains have been taken to make the work accurate, and to give full credit to authors and publishers. For any help the reader may give in pointing out errors or omissions of any sort I shall be grateful.

Highly valued assistance in producing the book was given by Mr. Maurice F. Tauber of the Temple University library staff, who prepared the bibliography and the subject index and helped in the task of preparing the material for the press. For encouragement in this project I am grateful to many students past and present, to a number of my colleagues, and to my wife, for more than twenty years best of companions in both work and play.

Q. A. K.

Glenside, Pennsylvania,
July, 1935.

Contents

PAGE

PREFACE vii

EDITOR'S INTRODUCTION, BY E. GEORGE PAYNE . . xiii

CHAPTER

I. CONCEPTS OF EDUCATION 1

II. CONCEPTS OF PHILOSOPHY AND PHILOSOPHY OF EDUCATION 27

III. NATURALISM IN EDUCATION 53

IV. PRAGMATISM IN EDUCATION 80

V. IDEALISM IN EDUCATION 102

VI. VALUES OF LIFE 123

VII. AIMS OF EDUCATION 141

VIII. THE INDIVIDUAL AND SOCIETY 167

IX. PHYSICAL HEREDITY IN EDUCATION . . 194

X. SOCIAL HEREDITY IN EDUCATION . . . 217

XI. WILL IN EDUCATION 240

XII. EDUCATION AND SOCIAL PROGRESS . . . 264

XIII. THE MEANING OF EXPERIENCE 296

XIV. PSYCHOLOGY AND EDUCATION 323

XV. THE FUNCTION OF THE CURRICULUM . . 360

XVI. THE PROBLEM OF METHOD 380

XVII. THE ROLE OF THE TEACHER 399

XVIII. EDUCATIONAL ORGANIZATION, ADMINISTRATION, AND SUPPORT 427

CHAPTER PAGE
XIX. Tests and Measurements in Education 449
XX. Education for Efficiency—Health, Vocation, Play 475
XXI. Education for Culture and Citizenship 493
XXII. Moral Life and Education 521
XXIII. Religious Life and Education 554

Bibliography 587
Index 609

Editor's Introduction

THE Scientific Movement of the nineteenth century brought with it a new conception of life, a view which regarded life as a process of development. While this new notion was taking form and finding expression in the writings of the period, science and mechanical invention were making revolutionary changes in the mode of living and in culture. The economic and social reconstruction affected communication, transportation, the organization of capital, and the whole industrial system. The late nineteenth and the beginning of the twentieth century marked the most tremendous and significant changes in material culture that the world had witnessed, and involved the best intelligence of the age in scientific research, in invention, and in the organization and control of industrial production.

Interest in science and material production, moreover, had its counterpart in the ethical and philosophical thought of the period, with emphasis upon pragmatism as the characteristic philosophy of the time. Pragmatic philosophy as developed by James, Dewey, and others came not only to characterize our ways of thinking but formed the basis of the development of the new education of the twentieth century. Even though the idealistic philosophers continued to be heard, they exerted a diminishing influence on the determination of educational policies, programs, and methods. The doctrine of "education as discipline," with its related views which guided educators in the nineteenth century, was replaced by the doctrine of "interest," which dominated educational thinking and writing and revolutionized educational programs and practices.

For a time, therefore, no other theory of education could get a hearing, and the good old doctrine of discipline appeared to be gone forever. More recently, however, we hear a critic now and then who dares to question the absolute validity of a pragmatic philosophy of life and education and to raise doubts as to the potency of the offspring of this philosophy, the doctrine of interest as it has worked out in educational practice and in life in the twentieth century. These critics even assert that many of the social ills of the present day are the direct outgrowths of educational practices based upon what they regard as a one-sided philosophy of life and education.

As a matter of fact, educational thinking has become so completely dominated by the pragmatic view, it has so fully involved educational theories and methods, and furthermore, it has so entirely controlled textbooks, that the present-day educational profession is generally unfamiliar with any other point of view. Whether or not we have gone too far in our too exclusive reliance upon educational theories growing out of the current philosophical emphasis is not the question of greatest importance in our present disturbed social order. What is more important is that we give those who are entering the educational profession a fuller view of life and the various philosophies that are current. In the interest of intellectual independence such an opportunity is essential.

The author of this volume has endeavored to present the various educational theories for the purpose of stimulating educational thinking in the broadest sense, so that students of education may approach their educational tasks without prejudice and without the weaknesses inherent in a one-sided view. This aim has been accomplished in this volume with both clearness and effectiveness.

E. GEORGE PAYNE

CHAPTER I

Concepts of Education

IN THIS chapter the student will find quotations illustrating a number of different concepts of education. For example, the concept that education is a process of development or unfolding from within is illustrated by the quotation from Pestalozzi (19). Again, statements will be found in which education is variously conceived as the reconstruction of experience, as culture, as discipline, as formation from without, as recapitulation, as conscious evolution, as the development of personality, and so on. Concepts of education are significant because they are reflected in the conduct of school systems, in the attitude of teachers, and above all in the treatment of children.

1

Education Is the Development of Personality

Education is the development of personality. We can therefore see at once that education is not something which can be imposed from without, and that it does not consist in mere acquisition of information as such, but information of such a character as embodies itself in capacity to use it in the expression of personality. Predominant in such information is that relating to moral obligation—obligation to cherish truth, to cherish the regard for others which we call goodness or charity, and to cherish beauty in all forms. It is through example which appeals to his own personality that the education of a pupil becomes effective, whether that example comes directly from a teacher, from fellow-pupils, or from the introduction to literature, history, art, and science in their widest sense. Even in the more technical forms of education it is the obligation to become useful that is the inspiring influence. The importance of good teaching for a nation's stability and strength can hardly be exaggerated.

Moral obligation is also the essential basis of industrial, social, and political activity. The capital invested in industry or in social or national undertakings would become worthless at once but for the honest and loyal service which makes industrial, social, and national organisation possible. When the spiritual value of this service is not recognised and acted upon, internal troubles become inevitable. Spiritual values encircle us everywhere, and cannot be expressed otherwise than as spiritual values, the expression of personality, and ultimately of divine personality. The mere interpretation of civilisation as the manifestation of physical, biological, or economic principles misses the fundamental fact that civilisation is the expression of divine personality. Included in this expression are the scientific principles themselves, since they are tools which personality has devised for the furtherance of its own values.

HALDANE, J. S. *Materialism* (New York, Harper, 1932), pp. 109-111.

2

Education Is World-Building

That the human being will, under any circumstances, build up some kind of a world is clear. To a large extent he does so unconsciously, and without any effort. But there are worlds and worlds. The world of the street waif who picks pockets and goes to the reformatory, or jail, is very different from the world of the great scientist, philosopher, artist or statesman. The former can be built up without any education; the latter cannot. The former affords few, small, and brief satisfactions; the latter many, great, and permanent ones. Since the human being is a sentient desire, which from its very nature demands the highest and most varied satisfaction, the aim of education must be to enable him to construct a world capable of yielding such satisfaction.

The evolution of the individual is the evolution of an ordered world in his consciousness. If this is true, the aim of education must be the evolution of such a world: education is world-building.

DAVIDSON, THOMAS, *Education as World-Building* (Cambridge, Harvard University Press, 1925), pp. 12, 13, 17.

3

Education as Conscious Evolution

In the light of our review of the principles of mental and physical development education can now be defined as conscious evolution. Its chief end is to carry on the race toward perfection, by bringing the youth of each succeeding generation to a higher degree of development than the one which has preceded. All institutions are to be judged according as they fulfill this one supreme purpose. All the great problems of the day must be regarded as in the last analysis educational problems, for their right solutions must be first of all such as will secure the advancement of the coming generation toward perfection of its virtues. The future of the nation depends, absolutely, upon the education of the young, and therefore education is the greatest of all political problems.

The chief danger of our times is over-individuation, the failure of youth to make the change at adolescence by which, reaching the completest maturity, it becomes physically and mentally devoted to the service of the race; and that therefore the present generation will draw upon the capital that should be preserved for the next. To a certain point we do most for the young by developing our own powers, but there is a point beyond which self-indulgence robs the future. Faith in the future of the race and love for youth are thus the moving forces in all right education. It is the function of all to participate in the welfare of the young, each in his own way. Thus teaching, in some sense, is a universal occupation. It is involved in all other practical aims of life, and should be in the minds of all whatever their work may be. Statesmanship, religion, science, are valuable, according as they contribute to the progress and ever higher development of man. The greatest of all reforms are educational reforms, and no others are complete until they affect education. Therefore progress in education is the best test of progress of civilisation. And the philosophy of education is the most fundamental philosophy. Its problem is nothing less than to understand life in such a way as to be able to construct an ideal environment for the development of the man who is to be, an environment which shall bring to the fullest unfolding every power and part of mind and body; that shall be intellectual training, physical culture, and still more education of the feelings and the will. All the culture material of the race must be adjusted wisely to the needs of the growing child. No education system, no school nor college is an end in itself, merely to serve our own generation, but all must be judged as factors in evolution. When we recall also that the school is the most universal of all social institutions, the depth and breadth of its problem becomes clear.

All who work in philosophic and scientific fields should be moved by this pragmatic ideal of knowledge, if they are to hold the right conception of their task. Too often the ideal of knowledge for its own sake is held up. This is narrow and selfish, and antagonistic to evolution, for it places the interests of the individual before those of the race. The largest possible aspect of all the truths of life and mind is practical—educational. The final test of the validity of all truths is their ability to satisfy certain deep needs. No system of thought is ever completely tested until it has been applied to the education of the young. It is a growing appreciation of this ideal on the part of educators which is working a change from interest centred in the school as an institution to interest grounded in a love of childhood, and a willingness to fit the school to the child, rather than the child to the school.

PARTRIDGE, GEORGE E., *Genetic Philosophy of Education* (New York, Macmillan, 1912), pp. 91-93.

4

James on the Meaning of Education

In our foregoing talk we were led to form a very simple conception of what an education means. In the last analysis it consists in the organizing of resources in the human being, of powers of conduct which shall fit him to his social and physical work. An uneducated person is one who is nonplussed by all but the most habitual situations. On the contrary, one who is educated is able to extricate himself, by means of the examples with which his memory is stored and of the abstract conceptions which he has acquired, from circumstances in which he never was placed before. Education, in short, cannot be better described than by calling it the organization of acquired habits of conduct and tendencies to behavior.

JAMES, WILLIAM, *Talks to Teachers* (New York, Holt, 1912), p. 29.

5

Education Defined in Terms of Service

Education is most satisfactorily defined in terms of its aim, which in turn must be derived from the end of man as determined by ethics. This has been stated in the perfection theory of ethics as "the realization of the highest self." In a social environment this "realization of the highest self" consists in contributing the highest service that it is possible for the individual to render to the environment. The individual has his own definite value to society both actually and potentially, and therefore the need of the individual is one of the needs of the social whole. Education, then, is the process by which an individual develops toward the highest service possible for him.

ROWE, STUART H., *Habit Formation and the Science of Teaching* (New York, Longmans, 1909), pp. 1-2.

6

Joseph Payne's Definition of Education

Education, in its widest sense, is a general expression that comprehends all the influences which operate on the human being, stimulating his faculties to action, forming his habits, moulding his character, and making him what he is.

Payne, Joseph, *Lectures on the Science and Art of Education* (New York, Kellogg, 1887), p. 62.

7

Education as Reconstruction

In its contrast with the ideas both of unfolding of latent powers from within, and of formation from without, whether by physical nature or by the cultural products of the past, the ideal of growth results in the conception that education is a constant reorganizing or reconstructing of experience. It has all the time an immediate end, and so far as activity is educative, it reaches that end—the direct transformation of the quality of experience. Infancy, youth, adult life,—all stand on the same educative level in the sense that what is really learned at any and every stage of experience constitutes the value of that experience, and in the sense that it is the chief business of life at every point to make living thus contribute to an enrichment of its own perceptible meaning.

We thus reach a technical definition of education: It is that reconstruction or reorganization of experience which adds to the meaning of experience, and which increases ability to direct the course of subsequent experience.

Dewey, John, *Democracy and Education* (New York, Macmillan, 1916), pp. 89-90.

8

Locke on Useful Education

"And since it cannot be hop'd he should have Time and Strength to learn all Things, most Pains should be taken about that which is most necessary; and that principally look'd after which will be of most and frequent Use to him in the World.

Seneca complains of the contrary practice in his Time. . . . What would he have thought if he had lived now? . . . He would have had much more Reason to say, as he does, *Non vitae sed scholae discimus,* We learn not to live but to dispute; and our Education fits us rather for the University than the World. But 'tis no wonder if those who make the Fashion suit it to what they have, and not to what their Pupils want. The Fashion being once establish'd, who can think it strange, that in this, as well as in all other Things, it should prevail? And that the greatest Part of those, who find their Account in an easy Submission to it, should be ready to cry out, *Heresy,* when any one departs from it? 'Tis nevertheless Matter of Astonishment that Men of Quality and Parts should suffer themselves to be so far misled by Custom and implicit Faith."

QUICK, R. H. (editor), *Locke on Education* (Cambridge, University Press [American agent, Macmillan, New York], 1884), p. 76.

9

Spencer on the Function of Education

How to live?—that is the essential question for us. Not how to live in the mere material sense only, but in the widest sense. The general problem which comprehends every special problem is—the right ruling of conduct in all directions under all circumstances. In what way to treat the body; in what way to treat the mind; in what way to manage our affairs; in what way to bring up a family; in what way to behave as a citizen; in what way to utilize all those sources of happiness which nature supplies—how to use all our faculties to the greatest advantage of ourselves and others—how to live completely? And this being the great thing needful for us to learn, is, by consequence, the great thing which education has to teach. To prepare us for complete living is the function which education has to discharge; and the only rational mode of judging of any educational course is, to judge in what degree it discharges such function.

Spencer, Herbert, *Education* (New York, Burt, no date), p. 16.

10

Tasks of Education Concrete and Specific

The tasks of education are concrete and specific. They have to do with the practical spending of the days. But it has been impossible to consider these tasks in any practical and helpful way without constantly referring to the underlying theory, to that genuine and inmost philosophy which really represents our attitude toward life. Sometimes this reference has been explicit, sometimes indirect, but always it has been necessary. For education ever presents itself as a double question. What do you want to do, How are you going to do it? And not only does the How depend upon the What, the means upon the end, but both, in the last analysis, depend upon a complex of consideration drawn from the whole realm of human knowledge and human faith. In reality, the educational process is a synthesis. It sums up in action the result of our complete contemporary thought.

Kant stated the human problem in his three well known questions: What can I know? What should I do? What may I hope? Human life is essentially a question, an inquiry. The very form of the problem makes it so clear that no final solution can ever be reached. No man answers the question with any degree of finality, even for himself. Still less can he answer it for others, or that different man which next year, next month, tomorrow, he himself becomes. We are infinitely fortunate in many and varied directions, but in nothing more fortunate than in this, that we never catch sight of any ultimate goal. We all have our moments of illusion. We catch sight of something which seems to us final and ultimate. We approach it, perhaps by rare good fortune even grasp it, but only to find that it is a milestone, something en route, and that the true goal lies beyond, over the luminous horizon in that future which we move toward and never reach.

HENDERSON, CHARLES H., *What Is It to Be Educated?* (Boston, Houghton Mifflin, 1914), pp. 421-422.

11

A Definition of Education

Education is the social agency which trains youth so that it may secure satisfaction through activities which are governed by the ideals that society thinks are valuable.

CHARTERS, W. W., *Curriculum Construction* (New York, Macmillan, 1923), p. 27.

12

Coursault on the Meaning of Education

At birth the child has only the crude basis for the purposes and the means of control which are necessary to guide his action effectively. He is incomplete; not yet himself. In order to realize the possibilities of his nature, he must be able to work for a living, but he knows no trade; he must share the responsibility of continuing the race, but he knows nothing of the duties of parenthood; he must help to promote justice and peace among men, but he knows nothing of human rights and duties; he must feel the inspiring thrill of a world purpose which sanctions the highest forms of human development, but he is ignorant of religion. Verily, he must be born again. Just as he passed through a process of development before he was born into the physical world, so he must pass through a superior process of development before he is born into the spiritual world. This superior process of development, in which the individual is equipped with the appreciations of value and the knowledge of control necessary for participation in social life, is education.

COURSAULT, JESSE H., *Principles of Education* (Boston, Silver, 1920), pp. 317-318.

13

Bolton on the Meaning of Education

Education is thus recognized as the manifold process of aiding the individual to come into full possession of all the desirable features of his heritage, to minimize the undesirable ones, and to initiate new tendencies. The child should be developed definitely in harmony with innate tendencies and toward the best ideals attained by the race. That is, both biological and social heredity are to be heeded. Education is consequently a process of development and of modification or adjustment to environment and to the ideals of perfection conceived by society and by the individual. It involves all the forces operating to mould the individual. These forces include natural environment, social environment, institutional environment, as well as the factors of food, clothing, climate, etc.

Bolton, Frederick E., *Principles of Education* (New York, Scribner, 1910), p. 11.

14

Education a Natural Process

That education is a natural, not an artificial process; that it is a development from within, not an accretion from without; that it comes through the workings of natural instincts and interests and not through response to external force; that it is an expansion of natural powers, not an acquisition of information; that it is life itself, not a preparation for a future state remote in interests and characteristics from the life of childhood,—these ideas constitute the fundamental teaching of Rousseau. The great variety of forms which these ideas have been given during the nineteenth century, even by many who repudiate the doctrines and influences of the "great leveler," are, after all, but new versions of the truth originally proclaimed in somewhat exaggerated form by Rousseau.

Monroe, Paul, *A Text-Book in the History of Education* (New York, Macmillan, 1930), p. 566.

15

Niemeyer's Concept of Education

Education is at once the art and science of guiding the young and of putting them in a condition, by the aid of instruction, through the power of emulation and good example, to attain the triple end assigned to man by his religious, social and national destination.

Quoted by Painter, Franklin V. N., *Luther on Education* (Philadelphia, Lutheran Publishing Society, 1889), p. 145.

16

Aristotle on True Education

"We must take the pleasures and pains that supervene upon our actions as symptoms of our condition. The man who abstains from bodily pleasures and actually enjoys doing so is temperate, while the man who does so but dislikes it is intemperate. The man who faces danger and enjoys it, or at any rate is not pained by it, is brave; but the man who faces it with pain is a coward. For goodness of character has to do with pleasures and pains. It is pleasure that makes us do what is bad, and pain that makes us abstain from what is right. That is why we require to be trained from our earliest youth, as Plato has it, to feel pleasure and pain at the right things. True education is just that."

This is the best account of the training of character that has ever been given and should be engraved in the heart of every educator.

Burnet, John, *Aristotle on Education* (Cambridge, University Press, 1913), p. 48.

17

Plato on the Nature of Education

Pleasure and pain I maintain to be the first perceptions of children, and I say that they are the forms under which virtue and vice are originally present to them. As to wisdom and true fixed opinions, happy is the man who acquires them, even when declining in years; and he who possesses them, and the blessings which are contained in them, is a perfect man. Now, I mean by education that training which is given by suitable habits to the first instincts of virtue in children:—when pleasure, and friendship, and pain and hatred, are rightly implanted in souls not yet capable of understanding the nature of them, and who find them, after they have attained reason, to be in harmony with her. This harmony of the soul, taken as a whole, is virtue; but the particular training in respect to pleasure and pain, which leads you always to hate what you ought to hate, and love what you ought to love, from the beginning to the end, may be separated off; and, in my view, will be rightly called education.

Plato, *Laws* (translated by Jowett), Book II, 653.

18

Froebel on Education

Education consists in leading man, as a thinking, intelligent being, growing into self-consciousness, to a pure and unsullied, conscious and free representation of the inner law of Divine Unity, and in teaching him ways and means thereto.

Froebel, Friedrich, *Education of Man* (New York, Appleton, 1887), p. 2.

19

Pestalozzi on Education

Sound education stands before me symbolized by a tree planted near fertilizing waters. A little seed, which contains the design of the tree, its form and proportions, is placed in the soil. See how it germinates and expands into trunk, branches, leaves, flowers, and fruit! The whole tree is an uninterrupted chain of organic parts, the plan of which existed in its seed and root. Man is similar to the tree. In the newborn child are hidden those faculties which are to unfold during life. The individual and separate organs of his being form themselves gradually into unison and build up humanity in the image of God. . . . It is not the educator who puts new powers and faculties into man, and imparts to him breath and life. He only takes care that no untoward influence shall disturb nature's march of development.

Krüsi, Johann H. H., *Pestalozzi* (Cincinnati, Hinkle, 1875), pp. 159-160.

20

What an Educated Person Is

To my mind, an educated person is not merely one who can do something, whether it is giving a lecture on the poetry of Horace, running a train, trying a lawsuit, or repairing the plumbing. He is also one who knows the significance of what he does; and he is one who cannot and will not do certain things. He has acquired a set of values. He has a "Yes" and a "No" and they are his own. He knows why he behaves as he does. He has learned what to prefer, for he has lived in the presence of things that are preferable. I do not mean that he is merely trained in the conventions of polite society or the conformities of crowd morality. He will doubtless depart from both in many things. Whether he has conformed or not, he has learned enough about human life on this planet to see his behavior in the light of a body of experience and the relation of his actions to situations as a whole. Such a person is acquiring a liberal education, and it makes little difference whether he has been trained in philosophy or mechanics. He is being transformed from an automaton into a thinking being.

Martin, Everett D., *The Meaning of a Liberal Education* (New York, Norton, 1926), p. 28.

21

Butler on the Meaning of Education

Life and education are identical, because the period to which we traditionally confine the latter term is merely the period of more formal, definite, determinate adjustment; yet, just as long as life lasts and our impressionability and plasticity remain, we are always adapting ourselves to this environment, gaining power, like Antaeus of old, each time we touch the Mother Earth from which civilization springs.

If education cannot be identified with mere instruction, what is it? What does the term mean? I answer, it must mean a gradual adjustment to the spiritual possessions of the race. These possessions may be variously classified, but they certainly are at least fivefold. The child is entitled to his scientific inheritance, to his literary inheritance, to his aesthetic inheritance, to his institutional inheritance, and to his religious inheritance. Without them he cannot become a truly educated man.

BUTLER, NICHOLAS MURRAY, *The Meaning of Education* (New York, Macmillan, 1898), p. 17.

22

Ralph Waldo Emerson on the Function of Education

Education should be as broad as man. Whatever elements are in him it should foster and demonstrate. If he be dexterous, his tuition should make it appear; if he be capable of dividing men by the trenchant sword of his thought, education should unsheathe and sharpen it; if he is one to cement society by his all-reconciling affinities, oh! hasten their action! If he is jovial, if he is mercurial, if he is greathearted, a cunning artificer, a strong commander, a potent ally, ingenious, useful, elegant, witty, prophet, diviner,—society has need of all these. The imagination must be addressed. Why always coast on the surface and never open the interior of Nature, not by science, which is surface still, but by poetry? Is not the Vast an element of the mind? Yet what teaching, what book of this day appeals to the Vast?

EMERSON, RALPH WALDO, *Education* (Riverside Series; New York, Houghton Mifflin, 1909), pp. 9-10.

23

The Problem of Education

We must understand that the child's life must be kept sacred to heredity, that the past can teach him far more than his teacher will be able to impart to him; that nature will direct his growth and point out the steps, and that only by taking advantage of the momentum of this past, and building upon the structures which nature establishes can education be made to assist nature. Otherwise nature and education will be in conflict in ways that can not fail to do harm to the child. The problem of education is to discover the stages and manner of transformations in the child, and learn how to facilitate growth, complete the co-ordination of these stages into a unity, supply the right culture or nutritive material, suited to each stage. Only thus can we expect to find educational standards, to protect against the many influences in society—in home, school, church, civilization generally—which tend to break up the natural process of growth of the child, make him precocious, drive him too early to specialised and practical life, and teach him what he is not ready to learn.

PARTRIDGE, GEORGE E., *Genetic Philosophy of Education* (New York, Macmillan, 1912), pp. 108-109.

24

Davidson on the Meaning of Education

Education, then, in so far as it depends upon conscious exertion, is that process by which a human being is enabled to transcend his original nature and attain his ideal nature or to be the most desirable thing that he can be.

DAVIDSON, THOMAS, *The Education of the Greek People* (New York, Appleton, 1894), p. 3.

25

Milton's Definition of Education

"I call therefore a complete and generous education that which fits a man to perform justly, skillfully, and magnanimously all the offices both private and public of peace and war."

Morris, Edward E. (editor), *Milton's Tractate on Education* (London, Macmillan, 1911), p. 9.

26

Comenius' Meaning of a Universal Education

We have already shown that everyone ought to receive a universal education, and this at school. But do not, therefore, imagine that we demand from all men a knowledge (that is to say, an exact or deep knowledge) of all the arts and sciences. This would neither be useful in itself, nor on account of the shortness of life can it be attained by any man. . . . It is the principle, the causes, and the uses of all the most important things in existence that we wish all men to learn; all that is to say, who are sent into the world to be actors as well as spectators. For we must take strong and vigorous measures that no man, in his journey through life, may encounter anything so unknown to him that he cannot pass sound judgment upon it and turn to its proper use without serious error.

Comenius, Johann Amos, *The Great Didactic* (Keatinge, editor; London, Black [American agent, Macmillan, New York], 1910), p. 70.

27

Huxley on the Meaning of a Liberal Education

That man, I think, has had a liberal education, who has been so trained in youth that his body is the ready servant of his will, and does with ease and pleasure all the work that, as a mechanism, it is capable of; whose intellect is a clear, cold, logic engine, with all its parts of equal strength, and in smooth working order; ready, like a steam engine, to be turned to any kind of work, and spin the gossamers as well as forge the anchors of the mind; whose mind is stored with a knowledge of the great and fundamental truths of Nature and of the laws of her operation; one who, no stunted ascetic, is full of life and fire, but whose passions are brought to heel by a vigorous will, the servant of a tender conscience; who has learned to love all beauty, whether of nature or of art, to hate all vileness, and to respect all others as himself.

HUXLEY, THOMAS H., *Science and Education* (New York, Appleton, 1897), p. 86.

28

Plato on a Good Education

A good education is that which gives to the body and to the soul all the beauty and perfection of which they are capable.

PLATO, *Laws*.

29

Bagley on the Meaning of Education

Education may be tentatively defined, then, as the process by means of which the individual acquires experiences that will function in rendering more efficient his future action. The life of the individual is limited: give him no guidance and each generation must practically repeat, step by step, the life of its predecessors. The only chance for improvement would lie, as with the lower animals, in the ability to change the habitat or in the proclivity to congenital variation. When, however, the individual has at his disposal not only his own experiences but those of his contemporaries and of his ancestors' contemporaries, the equipment that he possesses for his struggle with the environment is far and away superior to that of any other animal, and his chances for improvement and progress are far greater. It is hardly too much to say that education is the largest word in the vocabulary of life, for it symbolizes all those forces that have raised man from the plane of the brute, all those characteristics that differentiate him from the speechless anthropoid, the *homo alalus*, with which, not so very long ago, he was to be identified.

Bagley, William C., *The Educative Process* (New York, Macmillan, 1905), p. 22. (Adapted.)

30

Thorndike on the Meaning of Education

No clear boundary separates man's education from the rest of his life. In the broadest sense his education is his life.

Thorndike, Edward L., *Education* (New York, Macmillan, 1914), p. 4.

31

The Old and the New Meaning of Education

The term education commonly denoted the effect produced in the minds and morals of the young by the instruction and discipline of the school alone. . . . In these times it seems to be generally believed that in the broadest view, all phases of the environment that act upon the child and that set up any manner of response in him, contribute to establish his course in life, and so are truly educational for him.

O'Shea, M. V., *Education as Adjustment* (New York, Longmans, 1916), pp. 57-58.

32

Education Means Adjustment

Education is neither the mere acquisition of a body of knowledge nor the mere development of power and personality; it is adjustment; a life to be lived.

Adamson, John E., *Individual and Environment* (New York, Longmans, 1921), p. 10.

33

Quick on the Old and the New Education

The old education had one object, and that was learning. Man was a being who *learnt* and remembered. Education was a process by which he learnt, at first the languages and literatures of Rome and Greece only; but as time went on the curriculum was greatly extended. The New Education treats the human being not so much as a learner as a doer and creator. The educator no longer fixes his eyes on the object—the knowledge, but on the subject—the being to be educated. The success of the education is not determined by what the educated *know,* but by what they *do* and by what they *are.* They are well educated when they love what is good, and have had all their faculties of mind and body properly developed to do it.

QUICK, R. H., *Educational Reformers* (New York, Appleton, 1890), pp. 524-525.

34

Idealism in Education

We may be educational pragmatists in means and methods; we may be commercial and even materialistic in some of our vocational schools; but just as surely are we also social idealists in our aims and objectives, and a good half of us at least are also philosophical idealists, holding that, in the last analysis, education is the perfecting of both the individual and society in fulfillment of some "increasing purpose" moving toward some "far-off divine event."

HORNE, HERMAN HARRELL, "Looking in on American Education" in the *Journal of the N.E.A.* (Feb., 1927, p. 51).

35

Ruskin on Education

It happens that I have practically some connection with schools for different classes of youth; and I receive many letters from parents respecting the education of their children. In the mass of these letters, I am always struck by the precedence which the idea of a "position in life" takes above all other thoughts in the parents'—more especially in the mothers'—minds. "The education befitting such and such a station in life"—this is the phrase, this is the object, always. They never seek, as far as I can make out, an education good in itself: the conception of abstract rightness in training rarely seems reached by the writers. But an education "which shall keep a good coat on my son's back;—an education which shall enable him to ring with confidence the visitors' bell at double-belled doors—education which shall result ultimately in establishment of a double-belled door to his own home; in a word, which shall lead to advancement in life." It never seems to occur to the parents that there may be an education which in itself *is* advancement in life; that any other than that may perhaps be advancement in death; and that this essential education might be more easily got, or given, than they fancy if they set about it in the right way; while it is for no price, and by no favor, to be got, if they set about it in the wrong.

RUSKIN, JOHN, *Sesame and Lilies* (New York, Mershon, no date), pp. 49-50.

36

Aristotle on the Work of Education

"There are three things which make men good and virtuous: these are nature, habit, reason. In the first place, every one must be born a man and not some other animal; in the second place, he must have a certain character, both of body and soul. But some qualities there is no use in having at birth, for they are altered by habit, and there are some gifts of nature which may be turned by habit to good or bad. Most animals lead a life of nature, although in lesser particulars some are influenced by habit as well. Man has reason, in addition, and man only. Wherefore nature, habit, reason must be in harmony with one another (for they do not always agree); men do many things against habit and nature, if reason persuades them that they ought. We have already determined what natures are likely to be most easily molded by the hands of the legislator. All else is the work of education; we learn some things by habit and some by instruction."

Monroe, Paul, *Sourcebook of the History of Education* (New York, Macmillan, 1901), p. 273.

37

I Am Education

I am education. I bear the torch that enlightens the world, fires the imagination of man, feeds the flame of genius. I give wings to dreams and might to hand and brain.

From out the deep shadows of the past I come, wearing the scars of struggle and the stripes of toil, but bearing in triumph the wisdom of all ages. Man, because of me, holds dominion over earth, air, and sea; it is for him I leash the lightning, plumb the deep and shackle the ether.

I am the parent of progress, creator of culture, molder of destiny. Philosophy, science, and art are the works of my hand. I banish ignorance, discourage vice, disarm anarchy.

Thus have I become freedom's citadel, the arm of democracy, the hope of youth, the pride of adolescence, the joy of age. Fortunate the nations and happy the homes that welcome me.

The school is my workshop; here I stir ambitions, stimulate ideals, forge the keys that open the door to opportunity. I am the source of inspiration: the aid of aspiration. I am irresistible power. I am education.

The Progressive Teacher, March 1926, p. 26.

38

Harris on the Institutions That Educate

Each of these cardinal institutions (family, school, civil society, state, church) exercises on the members of society its peculiar education. It forms his mind through action and reaction. This fivefold form of education (counting the school as a separate institution) begins with man as an infant—a mere animal with no spiritual growth as yet, but with the possibility of infinite unfolding and achievement of the spiritual attributes of intellect, will-power, and affections.

When the child outgrows the narrow circle of family life and comes to the period when his interest centers on learning the ways of society outside of the family, its occupations and its forms of combination in the industries, and its means of intercommunication, then comes the period of the school, whose object is to initiate him into the technicalities of intercommunication with his fellow-men, and to familiarize him with the ideas that underlie his civilization, and which he must use as tools of thought if he would observe all the phases of human life around him; for these phases of human life—all that relate to human institutions, all that relate to the science of society, and to the moral structure of civilization—are invisible to the human being who has not the aid of elementary ideas with which to see them.

After the school comes the education of one's special vocation. The business pursuit, be it trade or profession, is an education in which the individual man learns to limit himself to a narrow sphere of activity so that thereby he can gain skill of production; and with this he learns to depend on his fellow-man for the supply of his many wants through exchange. He contributes the products of his own industry to the market of the world, and receives in return a share in all the production collected for redistribution in that great market.

The influence of the constitution of the state, and of its transactions with other states in peace and war, weaving the web of world history, is known to be more powerful in educating the individual and in forming his character than any of the three phases of education mentioned, for it underlies them and makes possible whatever perfection they may have. Without the protection of the state no institution can flourish, nothing above savage or barbarous human life can be realized.

Neither property nor individual life in the body is essential to the existence of the human soul; and it is this higher substantiality of the individual as immortal soul, responsible to a Personal God, which transcends the state and all subordinate institutions. This higher substantiality is taught to man in the fifth form of education—that which man receives through the spiritual institutions growing from art, religion, and science, and especially through the institution of the Church, which makes them possible. In the education of religion man learns to know himself as a being that transcends Nature in all its forms—even the highest form of Nature, which is that of organic life. He comes to realize the infinite character of his will and its acts, of his intellect and the truth it cognizes, of his affections and their Supreme Personal Object. Theology as enunciated by the church expounds the fundamental ideas which underlie the whole life of man; and therefore it happens that the form of religion confessed by a people is all-important in determining the degree of development of each and every other form of education, whether of the state, of social economy, of the school or of the family nurture.

Harris, William T., *Psychologic Foundations of Education* (New York, Appleton, 1898), pp. 264-269.

39

Rosenkranz on the Nature and Meaning of Education

The nature of education is determined by the nature of mind —that it can develop what it is in itself only by its own activity. Mind is in itself free; but, if it does not actualize this possibility, it is in no true sense free, either for itself or for another. Education is the influencing of man by man, and it has for its end to lead him to actualize himself through his own efforts. The attainment of perfect manhood as the actualization of the freedom essential to mind constitutes the nature of education in general. . . .

The idea of education may be more or less comprehensive. We use it in the widest sense when we speak of the education of the race, for we understand by this expression the connection which the situations and undertakings of different nations have to each other, as steps toward self-conscious freedom. In this the world-spirit is the teacher. . . .

In a more restricted sense we mean by education the shaping of the individual life by the laws of nature, the rhythm of national customs, and the might of destiny; since, in these, each one finds limits set to his arbitrary will. These mold him into a man often without his knowledge. For he can not act in opposition to nature, nor offend the ethical sense of the people among whom he dwells, nor despise the leading of destiny without discovering through experience that upon the Nemesis of these substantial elements his subjective power can dash itself only to be shattered. If he perversely and persistently rejects all our admonitions, we leave him, as a last resort, to destiny, whose iron rule must educate him, and reveal to him the God whom he has ignored. . . .

In the narrowest sense, which, however, is the usual one, we mean by education the influence which one individual exerts on another in order to develop the latter in some conscious and methodical way, either generally or with reference to some special aim.

Rosenkranz, Karl, *Philosophy of Education* (New York, Appleton, 1903), pp. 19-22.

40

Paul Monroe on the Meaning of Education

The meaning of education, as conceived in the present, is found in this harmonization of interest and effort. This is but another attempt to solve the problem of the individual and of society, which, as has been seen, has been the educational as it has been the ethical problem, from the beginning of human life. How is the individual to be educated so as to secure the full development of personality and at the same time preserve the stability of institutional life and assist in its evolution to a higher state? It is the old problem of securing both individual liberty and social justice. Interest and effort give in modern form Aristotle's problem of well-being and well-doing. Interest, representing the emphasis on the factor of individualism, is an outgrowth of the naturalistic movement of the eighteenth century. The education of effort is the survival in conservative circles of the old education of authority expressive of the religious and social views prevalent since the Reformation period. These views have survived longest in educational institutions that are controlled by religious denominations or by certain dominant classes in society, as in the English public schools and universities. . . .

The meaning of education, as at present conceived, is found in the attempt to combine and to balance these two elements of individual rights and social duties, of personal development and social service. The meaning of education in the present finds its whole significance in this very process of relating the individual to society, so as to secure both development of personality and social welfare.

Monroe, Paul, *Brief Course in the History of Education* (New York, Macmillan, 1907), pp. 405-406.

41

Horne on the Nature of Education

It now remains for us only to incorporate these philosophical elements with our preceding empirical conception of education, in order that finally may appear in as complete a fashion as we can frame it our definition of the real and true nature of education. Philosophy has taught us to think that the adjustment to environment upon which biology insisted as the essence of education is really an endless process. The flow of time brings man momentarily and unendingly into a new and changing environment requiring a continual adjustment thereto. Concerning that physical body upon whose proper treatment physiology could not too strongly insist, philosophy reminds us that it is the temporary vesture of the mind to be utilized while it lasts and then laid aside. As for that development of mind which psychology stressed as the natural fruitage of the educational process, philosophy reminds us that the mind of man is fashioned for a growth that is unceasing. Concerning that environment to which education adjusts man, and which sociology defined for us as the achievement of humanity in the world as it attempted to know, to appreciate, and to do, philosophy has said that it is God, manifesting Himself in the temporal power, through man's ideals of Truth, Beauty, and Goodness. And of the conscious human being who all along has been our worthy object of educational endeavor, philosophy teaches us to think as free, capable of fashioning to some extent his own future according to his own plan.

Putting all these matters together and summarizing our preceding total inquiry concerning the nature of education, we reach the following last conception: Education is the eternal process of superior adjustment of the physically and mentally developed, free, conscious, human being to God, as manifested in the intellectual, emotional, and volitional environment of man.

HORNE, HERMAN HARRELL, *The Philosophy of Education* (New York, Macmillan, 1905), pp. 284-285.

CHAPTER II

Concepts of Philosophy and Philosophy of Education

THE excerpts in this chapter illustrate concepts of philosophy and philosophy of education. In the quotation from Royce (42) philosophy is defined as reflection upon the meaning of life with its varied experiences. G. Stanley Hall, as interpreted by Partridge (43), stresses the fact that the great verities of life are formulations of the feelings—truths that can not be reached by argument or demonstration—and that a philosophy of education must take into account the emotional and volitional as well as the intellectual elements of life. Brightman (45) defines philosophy as primarily the thinking attitude. Horne (51) describes the characteristic method of philosophy. Other quotations from writers both ancient and modern are intended to make the chapter as a whole serve the purpose of acquainting the student with various concepts of philosophy and philosophy of education.

42

Royce on the Meaning of Philosophy

The assumption upon which these lectures are based is one that I may as well set forth at the very beginning. It is the assumption that Philosophy, in the proper sense of the term, is not a presumptuous effort to explain the mysteries of the world by means of any superhuman insight or extraordinary cunning, but has its origin and value in an attempt to give a reasonable account of our own personal attitude towards the more serious business of life. You philosophize when you reflect critically upon what you are actually doing in your world. What you are doing is of course, in the first place, living. And life involves passions, faiths, doubts, and courage. The critical inquiry into what all these things mean and imply is philosophy. We have our faith in life; we want reflectively to estimate this faith. We feel ourselves in a world of law and of significance. Yet why we feel this homelike sense of the reality and the worth of our world is a matter for criticism. Such a criticism of life, made elaborate and thorough-going, is a philosophy.

ROYCE, JOSIAH, *The Spirit of Modern Philosophy* (New York, Houghton Mifflin, 1892), p. 1 f.

43

The Philosophical Basis of Education

A true philosophy, whatever else its purpose or merits, must bear the tests, both of inspiring youth with right attitudes toward life, and of inculcating correct views of education throughout society. It must be a body of principles capable of furnishing deep and wholesome motives and beliefs to teacher and parent, and it must be a creed suited to the needs of effective, practical living. In a word, a philosophy, to be true, must do more than merely hold together logically. It must have practical bearings. It must not merely dictate to conduct; it must also serve. In a very deep sense, it is quite as reasonable to say that philosophy is based upon education, as that education is based upon philosophy. Philosophy grows out of life, as its broadest and deepest meaning, formulated by the same powers of heart and mind that we apply to our other tasks. Only as such a sum of wisdom has it a right to dictate either to reason or to conduct.

The tests through which a philosophy must pass before it can be judged true are, therefore, many and severe. It must first of all be optimistic, pointing always toward the future rather than the past. It must grow out of, and be in harmony with, instincts and feelings. It must agree with common sense, with sight and touch, and with all the realities of life. It must find a place for the facts of the physical sciences, and also for the truths of the world of ideals and imagination. Above all, it must inspire the young to activity, and to a love of knowledge.

These tests require that philosophy shall present the world to the mind as real—as doubly real. It is so for life; it must remain so in philosophy. We live in a world of physical facts, laws, and things. It is also a world of spiritual things, of things imagined rather than known, believed rather than proved. A true philosophy must stimulate the mind to live in both these worlds; to enjoy them, to believe in their reality. If philosophy merely substitutes for concrete experiences the intellectual effort completely to harmonise the world to the reason, it is wrong, for then it fails to make all of reality seem real. Thinking is not the only nor the surest, road to truth. The intellect is at best a superficial part of the mind. Excessive analysis, introspection, and criticism is morbid. It can give us but a narrow view of reality, and can not alone reach the eternal verities. Reasoned philosophies and theologies pass away, but the deeper philosophy of poetry, folklore, belief—all that which comes from the heart—endures. All the great verities, religious and ethical, are formulations of the feelings—things believed rather than known or proved; truths that can not be reached by argument nor demonstration.

Any philosophy that fails to make youth enthusiastic in the right way; that fails to create interest in realities; that makes youth pessimistic or blasé; that arouses intellect more than feeling; that breeds familiarity with the universe, destroying wholesome awe and wonder, is wrong. It is wrong because it will not pass the profoundest test we have—fitness to lead men to the fullest enjoyment of a normal life of activity and interest in the future. The intellect has no higher claims to judge truth than these immediate feelings—nor so high—for it represents the individual alone, while the feelings are racial, and reveal to us truths larger than the self. All thought must eventually be brought to this test. Everything that claims to be thought good, beautiful, or true, must pass the censorship of our practical judgments. Anything that offends our deepest instincts as teachers and parents, or that is seen to be unfit to teach to youth, can not be called true in the deepest sense.

No philosophy can be said to be proved valid until it is seen what it can do, directly or indirectly, for the coming generation. It is in this sense that it has been said that philosophy is dependent upon education. All truth has work to do, and its function is to guide and direct experience. Truth is, therefore, in its last analysis, a tool of evolution—a part of the whole device we call education. Thought and action are mutually dependent. No system of truth can be reasoned out, from which alone practical rules of conduct can be derived. And no practical activity can be wholly right unless it has broadened out its grasp to include the deepest meaning of life.

PARTRIDGE, GEORGE E., *Genetic Philosophy of Education* (New York, Macmillan, 1912), pp. 7-9.

44

James on Philosophy

In the preface to that admirable collection of essays of his, called *Heretics,* Mr. Chesterton writes these words, "There are some people—and I am one of them—who think that the most practical and important thing about a man is still his view of the universe. We think for the landlady considering a lodger it is important to know his income, but still more important to know his philosophy. We think for a general about to fight an enemy it is important to know the enemy's numbers, but it is still more important to know the enemy's philosophy. We think the question is not whether the theory of the cosmos affects matters but whether in the long run anything else affects them."

I think with Mr. Chesterton in this matter. I know that you, ladies and gentlemen, have a philosophy each and all of you, and that the most interesting and important thing about you is the way in which it determines the perspective of your several worlds. You know the same of me. The philosophy which is so important in each of us is not a technical matter. It is our more or less dumb sense of what life honestly and deeply means; it is only partly got from books; it is our individual way of just seeing and feeling the total push and pressure of the cosmos.

James, William, *Pragmatism* (New York, Longmans, 1907), p. 3 f.

45

Philosophy the Thinking Attitude

Philosophy may be defined as the attempt to think truly about human experience as a whole; or to make our whole experience intelligible. The world is its parish. Everything in the universe, which in any way enters into human experience, or affects, or is known by human beings, is of interest to philosophy. . . .

Philosophy is the thinking attitude. Thinking in the true sense is the process of relating judgments logically to the end of solving some problem or problems. Much that is commonly called thinking is a mere holding of opinions, or awareness of associated ideas, or mental drifting. Thinking is an art requiring much practice. It must be learned, like swimming, skating, or aviation. All living involves judging, and in some sense, all living involves thinking, be it good or bad. Anything that can enlarge the power of thought is a boon to man. Much education is mere memory-drill, which is disturbed by no breath of real thought. In the study of mathematics, and of the sciences, and of the humanities, there should be constant challenge to thorough and precise or to broad and profound thinking. But there is no discipline that so constantly demands the power of thought as does philosophy. Philosophy can not be learned. It must be thought out. The classics of philosophy are perhaps the best intellectual gymnasium in all literature. If there is such a thing as learning to think, philosophy is the master-teacher of the art. . . .

The unique contribution of philosophy to human life is that it furnishes a tool for the interpretation of the meaning and goal of life; a background, which gives unity to our science, our art, our literature, our morals, our religion, indeed to our whole civilization and also to our most intimate personal experiences. He who knows what he thinks about fundamental questions, and why he thinks as he does, and who has faced life's meaning as a whole, has broken down the "water-tight compartments" into which (as James told us) men's minds tend to divide themselves; and he is able to move freely from any one part of his life to every other without running into obstacles or contradictions. His art and his morals, his science and his religion, will perform each its appropriate function, and each will live in harmonious coöperation with the other, in so far as the conditions of life render it possible. In short, to philosophize is to be a human being with one mind instead of a chaos of conflicting feelings, prejudices, and opinions. The prayer of the psalmist is, "Unite my heart to fear thy name." The philosopher's prayer is, "Unite my mind to understand thy universe."

Brightman, Edgar Sheffield, *An Introduction to Philosophy* (New York, Holt, 1925), pp. 4, 18, 21-22.

46

Science and Philosophy

What science alone cannot do for us philosophy attempts. Each is concerned with facts, but each approaches them in a different way. Science is concerned with the order in which things happen and the processes through which they pass; philosophy with their meaning and value. Science works through analysis and classification; philosophy gives greater weight to the intuitions of faith. Philosophy treats of the wholes of which the sciences describe the parts and attempts to answer the questions which the sciences raise but which they themselves cannot answer.

We may illustrate the difference in the case of a particular science like geology or psychology. Geology tells us the story of the way in which our present earth has come to be what it is, a process much longer and more complicated than our fathers supposed. What it means for us that it has taken this form rather than another, geology cannot tell us. That is the work of philosophy; and the different schools of philosophy differ in their answer. Materialists tell us that matter is the ultimate reality. Idealists say that it is spirit; theists that it is a personal God, in some respects akin to us.

So psychology describes for us the genesis of our consciousness and analyzes it into its elements. It points out its connection with the nervous system and its antecedents in instinct and impulse. But what the self really is, whence it came, and whither it is going, psychology cannot tell us. That is the function of philosophy, and, most of all, of theology, which is the philosophy of religion.

BROWN, WILLIAM ADAMS, *Beliefs That Matter* (New York, Scribner, 1928), pp. 74-75.

47

Paulsen on the Meaning of Philosophy

Philosophy is not a matter that can outlive its usefulness. Nor is it the business of a few barren and abstruse thinkers, but the concern of all ages and all mankind. Indeed, we may say, philosophy is not something that one may have or not have at will. In a certain sense every human being that rises above the dull level of animal life has a philosophy; the only question is what kind of philosophy he has. Is it one rudely fashioned from a few stray fragments of knowledge and disconnected thoughts, or one that is the result of thorough and logical study, and founded upon a universal examination of reality.

The intellectual life of man is distinguished from that of the brute by his capacity to theorize and his ability to see things in their relation to the whole. The lower animal sees and hears, and, most likely, has ideas and recollections, but does not reflect on them. They come and go as isolated facts in the natural course of events. They are significant only as motives for the will. In man, intellectual activity emancipates itself from necessity. Theoretical interest is aroused. He gathers and examines the elements supplied by perception;

he does not rest until he has combined them into a systematic conception of the whole. Practice and technics are satisfied with a knowledge of details; theoretical interest is directed towards the whole. In this way philosophy arises. In the most general sense of the term, philosophy is simply the continually-repeated attempt to arrive at a comprehensive and systematic knowledge of the form and connection, the meaning and the import of all things.

Paulsen, Friedrich, *Introduction to Philosophy* (translated by Thilly; New York, Holt, 1895), p. 2 f.

48

Will Durant on the Meaning of Philosophy

Philosophy is a hypothetical interpretation of the unknown (as in metaphysics), or of the inexactly known (as in ethics or political philosophy); it is the front trench in the siege of truth. Science is the captured territory; and behind it are those secure regions in which knowledge and art build our imperfect and marvelous world. Philosophy seems to stand still, perplexed; but only because she leaves the fruits of victory to her daughters the sciences, and herself passes on, divinely discontent, to the uncertain and unexplored. . . .

Science gives us knowledge, but only philosophy can give us wisdom.

Durant, Will, *The Story of Philosophy* (New York, Simon & Schuster), pp. 2-3.

49

Lotze on Philosophy

Philosophy is a mother wounded by the ingratitude of her children. Once she was all in all; Mathematics and Astronomy, Physics and Physiology, not less than Ethics and Politics received their existence from her. But soon the daughters set up fine establishments of their own, each doing this earlier in proportion as it had made swifter progress under the maternal influence; conscious of what they had now accomplished by their own labor, they withdrew from the supervision of Philosophy, which was not able to go into the minutiae of their new life, and became wearisome by the monotonous repetition of insufficient counsels. And so when every offshoot of investigation which was capable of life and growth had separated itself from the common stem and taken independent root, it fell to philosophy to retain as her questionable share the undisputed possession of as much of all problems as remained still inexplicable.

LOTZE, HERMAN, *Microcosmus* (New York, Scribner, 1885), Vol. II, p. 345.

50

Sellars on the Meaning of Philosophy

Philosophy is a persistent attempt to gain insight into the nature of the world and of ourselves by means of systematic reflection. I have selected this definition from a large number because it stresses an important point. Philosophy is, first of all, an activity. It is a continuous seeking of insight into basic realities; the physical world, life, mind, society, knowledge, values.

This preliminary definition stresses the broadness of aim and interest characteristic of philosophy. It is an effort dominated by the thought of the whole fabric of existence, a search into fundamentals. We must bear in mind this breadth of interest because philosophy has likewise the need of making special investigations of its own in furtherance of this interest. Thus our subject is a collection of sciences such as theory of knowledge, logic, cosmology, ethics and aesthetics, as well as a unified survey. Yet while there are these divisions, it is equally true to say that none of them can be complete by itself. More than any other subject, perhaps, philosophy feels the interconnection of all fields. It tries to penetrate deeply and yet see the bearings of things upon one another.

SELLARS, R. W., *The Principles and Problems of Philosophy* (New York, Macmillan, 1926), pp. 3-4.

51

Horne on the Method of Philosophy

The characteristic method of philosophy is to take what facts it can find in a given field of human experience and seek to determine their meaning. Each such field is itself a fragment of the whole human experience, and our whole human experience appears itself but a fragment, implying for its interpretation the existence of a still larger and inclusive experience within which all meanings get their fulfillment. Any such chosen section of human experience indicates something as to its own final value and lasting significance. The part implies the whole, and the meaning of the part it is that suggests the nature of the whole. The method of philosophy is to construct the whole from the meaning of some of its parts, just as the complete statue or animal is restored by artist or scientist from its bust or bone. Philosophy has no new facts of its own to consider, it has only to consider the old facts in its own new way. Given such fragments of experience as men possess, to restore the whole, that is the problem of philosophy. What must the final truth be in order to do justice to this fragmentary bit of experience as now known? This is the question of philosophy. The instrument of philosophy is thought, as it attempts to follow out in some final and self-consistent fashion the intimations of partial experiences. The invisible things are really made known in part through the things that do appear, just as Agassiz or Gray could describe the life-history of an animal or plant from tooth or leaf. One thing implies another, things go together, nothing is isolated and unrelated, all things are interdependent in the unity of the whole,—such well-known truths as these philosophy takes seriously, and from such details as it can find it attempts the work of restoration. It is a perfectly legitimate method of mental procedure, as used and vindicated by both science and art; only the whole which philosophy seeks is larger, even reality itself. In brief, the method of philosophy is reflection.

HORNE, HERMAN HARRELL, *The Philosophy of Education* (New York, Macmillan, 1927), pp. 257-258.

52

Fullerton on the Meaning of Philosophy

Perhaps the most just way to get a preliminary idea of what philosophy means to the men of our time is to turn away for the time being from the definition of any one man or group of men, and to ask ourselves what a professor of philosophy in an American or European university is actually supposed to teach.

It is quite clear that he is not supposed to be an Aristotle. He does not represent all the sciences, and no one expects him to lecture on mathematics, mechanics, physics, chemistry, zoology, botany, economics, politics and various other disciplines. There was a time when he might have been expected to teach all that men could know, but that time is long past.

Nevertheless, there is quite a group of sciences which are regarded as belonging especially to his province, and although a man may devote a large part of his attention to some one portion of the field, he would certainly be thought remiss if he wholly neglected the rest. This group of sciences includes logic, psychology, ethics and aesthetics, metaphysics and the history of philosophy. The latter constitutes a very important part of the work of the teacher of philosophy in our day.

FULLERTON, GEORGE S., *Introduction to Philosophy* (New York, Macmillan, 1906), p. 12.

53

A Behaviorist on Metaphysics

The metaphysical problem as it presents itself for analysis, can only be a study of the biosocial antecedents of the language responses (metaphysical discussions) recorded in the literature as the verbo-motor responses of individuals who, for the time being, are classified as metaphysicians. The scientific solution is thus narrowed down to an investigation of the metaphysician's heredity and training. All metaphysical discussions, no matter how profound and involved they may be, are in the last analysis nothing but language responses and linguistic habits derived from other language responses. In science, observation and the analysis of experiential conditions play a much larger part. When the metaphysical problem is stated in the form of the question, What are the essentials of reality? the term reality for the behaviorist is merely a word stimulus which individuals of a given social status use to designate the fact that the responses occurring at any one moment might be more complex and varied than they actually are if the bodily response mechanism were more complex than it really is.

WEISS, ALBERT PAUL, *Theoretical Basis of Human Behavior* (Columbus, Adams, 1929), pp. 45-46.

54

Need of Philosophic Educational Thinking

In our striving to imitate the industrial world in standardizing, measuring, and testing we have neglected one of the great essentials of education; namely, that of knowing what life is for, in what direction society is moving, and to what end it struggles. We need, no doubt, a revival of philosophic thinking to the end that our educational processes may have purpose and ultimate goals.

PITTENGER, BENJAMIN F., in *Journal of Education* (Boston, November 12, 1928, p. 433).

55

Bagley on Philosophy

Philosophy, which may be called the science of sciences, is popularly supposed to be the most impractical pursuit to which the energies of man can be given; for while a science may bring forth some detailed judgments that find immediate practical application, philosophy is entirely concerned with making the various sciences consistent with one another and in tracing out the fundamental postulates upon which all knowledge rests. Its goal is coherent organization of all knowledge. Yet the fact that improvement in organization yields practical results in the various special sciences justifies our faith that a still wider improvement of organization which aims to bring all the facts and principles of all sciences into a coherent system will work an influence on practical life commensurate with its comprehensive character. Thus, though philosophy "bakes no cakes," as the ancient proverb reminds us, its influence may still operate to render even the baking of cakes more efficient.

BAGLEY, WILLIAM C., *The Educative Process* (New York, Macmillan, 1905), pp. 163-164.

56

General Principles of Education

1. The primary object of education is the perfection of the individual.
2. The perfection of the individual is attained by a harmonious development of all his powers.
3. These powers develop naturally in a certain order, which should be followed in education.
4. The basis of this development is the self-activity of the child.
5. This self-activity has two distinct phases; from without inward,—receptive and acquisitive; and from within outward,—productive and expressive.
6. These two phases, the receptive and productive, should go hand in hand in the work of education.
7. There must be objective realities to supply the condition for the self-activity of the mind.
8. Education is not creative; it only assists in developing existing possibilities into realities.
9. Education should be modified by the different tastes and talents of the pupil.
10. A scheme of education should aim to attain the triune results—development, learning, and efficiency.

BROOKS, EDWARD, *Normal Methods of Teaching* (Philadelphia, Normal Publishing Company, 1889), pp. 18-25.

57

Patrick on the Meaning of Philosophy

Philosophy has been defined as the cultural study of meanings and values, or still more concisely as the interpretation of life. Or, adopting the oft quoted phrases of Matthew Arnold, we may say that philosophy is the attempt to see life steadily and to see it whole. In this telling phrase both the aim and the method of philosophy are given. The aim is to see life as a whole, not with the slant of the scientist or the businessman or the clubman or the artist or poet or preacher or the university professor, nor with any slant at all; but to see it as it would be seen by "the spectator of all time and all existence"; and the method is to see it steadily with neither prejudice nor bias nor half knowledge.

Patrick, George T. W., *Introduction to Philosophy* (Boston, Houghton Mifflin, 1924), pp. 1-2.

58

Leighton on the Meaning of Philosophy

A complete philosophy includes a world-view, or reasoned conception of the whole cosmos, and a life-view, or doctrine of the values, meanings and purposes of human life. Philosophy, like science, consists of theories or insights arrived at as a result of systematic reflection or reasoning in regard to the data of experience. It involves, therefore, the analysis of experience and the synthesis of the results of analysis into a comprehensive or unitary conception. Philosophy seeks a totality and harmony of reasoned insight into the nature and meaning of all the principal aspects of reality. . . .

Philosophy is more fundamental and comprehensive than science, otherwise they are identical in their aims. Philosophical knowledge has three fundamental characteristics: (1) It is fundamental knowledge. (2) It is most comprehensive or generalized knowledge. (3) It is most unified and consistent knowledge.

The aim of philosophy is to discover the full meaning and relations of Truth, Beauty and Goodness, and to determine their place in the universe of reality. Philosophy is an attempt to determine reflectively human life in all its relations. The philosopher aims to "see life steadily and to see it whole." Plato says "the unexamined life is not a truly human life." Philosophy is rational reflection upon experience, belief and conduct. It is closely related to science, conduct and religion.

LEIGHTON, JOSEPH A., *The Field of Philosophy* (New York, Appleton-Century, 1930), pp. 3-4.

59

Aristotle on the Origin and Nature of Philosophy

"It was owing to wonder that men began to philosophize in earlier times just as it is today, wondering at first about the problems that lie close at hand, and then little by little advancing to greater perplexities, such as the phenomena of the moon and sun and stars, and the creation of the universe. But one who is perplexed and filled with wonder feels himself to be in ignorance, and so the lover of the myth is in a way the lover of wisdom, for the myth too is made of marvels. And so if men philosophized in order to escape ignorance it is evident that they pursued wisdom just for the sake of knowing, not for the sake of any advantage it might bring. This is shown too by the course of events. For it was only after practically all things that are necessary for the comfort and convenience of life had been provided that this kind of knowledge began to be sought. Clearly then we pursue this knowledge for the sake of no extraneous use to which it may be put, but, just as we call a man free who serves his own and not another's will, so also this science is the only one of all the sciences that is liberal, for it is the only one that exists for its own sake. . . . More necessary, indeed, every other science may be than this, more excellent there is none."

BAKEWELL, CHARLES MONTAGUE, *Source Book in Ancient Philosophy* (New York, Scribner, 1907), p. 217.

60

Russell on Philosophy

Philosophy, like all other studies, aims primarily at knowledge. The knowledge it aims at is the kind of knowledge which gives unity and system to the body of the sciences, and the kind which results from a critical examination of the grounds of our convictions, prejudices, and beliefs. But it can not be maintained that philosophy has had any very great measure of success in its attempts to provide definite answers to its questions. If you ask a mathematician, a mineralogist, a historian, or any other man of learning, what definite body of truth has been ascertained by his science, his answer will last as long as you are willing to listen. But if you put the same question to a philosopher, he will, if he is candid, have to confess that his study has not achieved positive results such as have been achieved by other sciences. It is true that this is partly accounted for by the fact that, as soon as definite knowledge concerning any subject becomes possible, this subject ceases to be called philosophy, and becomes a separate science. The whole study of the heavens, which now belongs to astronomy, was once included in philosophy; Newton's great work was called "the mathematical principles of natural philosophy." Similarly, the study of the human mind, which was, until very lately, a part of philosophy, has now been separated from philosophy and has become the science of psychology. Thus, to a great extent, the uncertainty of philosophy is more apparent than real: those questions which are already capable of definite answers are placed in the sciences, while those only to which, at present, no definite answer can be given, remain to form the residue which is called philosophy.

Russell, Bertrand, *The Problems of Philosophy* (Home University Library of Knowledge, No. 35; New York, Holt, no date), p. 239 f.

61

Harris on the Meaning of Philosophy

Philosophy seeks to discover the bearing of all the conditioning circumstances on a situation. It is evident that the ultimate ground of action must always be a moral one, therefore, because the motive, express or implied, must always be some relation to the purpose that rules in the universe, its ultimate fact. Such relations are defined in only two ways—by religion or by philosophy. . . .

The spirit of the first stage of scientific investigation is opposed to the practical, because it devotes itself to inventorying. Wisely to act, we must stop our inventory and assume that all our facts are in; we must close the case without taking further testimony, and, in view of what is already known, do our deed.

All considerate action demands this general survey over the whole inventory and a distinct withdrawal of the mind from the investigation of fresh details. There must be a resolve to stop inventorying and close the case. "In view of so much investigation as has been completed, it seems wise to act thus and so"—and then we act.

After the deed is done we open our case once more and proceed with our inventorying until it becomes necessary to act again; for the course of experience is a continual process of inventory. This is true of all practical provinces. In medicine, we must try to heal with such remedies as we have discovered, and not wait until we have completed our science of healing. In politics, we must act in the light of such parts of history as have been inventoried, and not pause for the whole to be completed. Practical action, the human will, must close its inventory and take its general survey, and act on its generalization as if the insight were complete.

It is quite as important that as soon as the necessity for action is past, we should again open our investigations and proceed with our inventory. The inventory of the existing details of a province is something that can never be completed.

If we delayed all practical action until this is complete, we should never act at all.

Moreover, if we delayed our general survey, i.e., the philosophic attitude, until the inventory were complete, we should never take a general survey. But as practical steps must be taken and deeds be done, it is perpetually necessary to introduce the philosophic attitude of mind—that attitude which lets go its hold on some particular detail and, metaphorically, stands back so as to take a general survey of the whole in its proportions.

So long, therefore, as the human will may act, as well as the intellect perceive, there is a necessary province of philosophical activity, and no practical man can escape it. If the practical man despises the philosophical aspect, his contempt is apt to appear in the one-sidedness and self-contradictory character of his deeds; for his contempt will cause neglect and carelessness in his general survey—he will not sum up the case judicially, but will give undue weight to some items of his inventory.

The moral quality of deeds involves one's theory of the first principle of the universe. Inasmuch as every deed must be considered in its moral aspect before it can be called considerate, we see how completely the philosophical phase of the mind mediates between science and practice.

HARRIS, WILLIAM T., *Psychologic Foundations of Education* (New York, Appleton, 1898), pp. 387-389.

62

Schwegler on the Meaning of Philosophy

It is not in its material, but in its form, in its method, in its mode of knowledge, that philosophy is to be distinguished from the empirical sciences. These latter derive their material directly from experience; they find it at hand and take it up just as they find it. Philosophy, on the other hand, is never satisfied with receiving that which is given, simply as it is given, but rather follows it out to its ultimate grounds; it examines each individual thing in its relations to a final principle, and considers it as one element of a complete system of knowledge.

SCHWEGLER, ALBERT, *History of Philosophy* (translated by Seeley; New York, Appleton, 1905), pp. 15-16.

63

Weber on the Meaning of Philosophy

Philosophy is the search for a comprehensive view of nature, an attempt at a universal explanation of things. It is both the summary of the sciences and their completion; both general science and a specialty distinguished from science proper; and like its elder sisters, religion and poetry, forms a separate branch among the manifestations of the human mind. In philosophy . . . the human mind endeavors to explain the world as a whole, or the universal fact or phenomenon, by the cause of causes, or the first cause. In other words, it attempts to answer the question, Why does this world exist, and how does it happen to be what it is? Science is the indispensable foundation and the matter, as it were, of philosophy; it is, to use an Aristotelian phrase, potential philosophy. Philosophy, in turn, is science *in actu,* the most exalted function of the scholar, the supreme satisfaction of the scientific spirit and its natural tendency to comprehend everything into a unity.

WEBER, ALFRED, *History of Philosophy* (New York, Scribner, 1896), pp. 1-2.

64

Calkins' Distinction Between Philosophy and Science

The really important problem of the definition of philosophy is consequently this: to distinguish philosophy from natural science. Evidently, philosophy differs from science negatively in so far as, unlike science, it does not seek and classify facts, but rather takes its materials ready made from the sciences, simply reasoning about them and from them. But if this constituted the only contrast, then philosophy would be a part, merely, of science, not a distinctive discipline. For science does not stop at observation, though it begins with it; in truth, science as well as philosophy reasons and explains. Philosophy, therefore, if conceived simply as the process of reasoning about scientific phenomena, would be merely the explanatory side of science. There are, however, in the view of most students, two important contrasts which hold between science and philosophy: philosophy must take as its object the utterly irreducible nature of some reality; and philosophy must take as its object the ultimate nature not only of a single fact or a group of facts, but of all that there is, "the ultimate reality into which all else can be expressed and which cannot itself be expressed in terms of anything outside itself."

CALKINS, MARY WHITON, *Persistent Problems of Philosophy* (New York, Macmillan, 1907), pp. 3-4.

65

Finney on the Need for Philosophy

Now this work of providing the present age with guiding theories of the highest pragmatic validity in the new situations, involves two distinct and radically different kinds of intellectual labor. The aim of the one is to uncover new facts; the aim of the other is to reorganize our prevailing beliefs in such a way as to incorporate those new facts. The one is research; the other is resynthesis. Old beliefs, like old machines, have to be taken apart and put together again, new parts being put in the place of those that are worn out or antiquated. This work is not research. Research differs from this kind of work as the invention of new contrivances for automobiles—the dry clutch, the vacuum feed, the Bendix drive—differs from the redesigning of the old modes so as to include the new contrivances. And the more of such inventions there are, the more of such redesigning there must follow. Similarly, the more the findings of research in the various fields of science, the greater becomes the need of piecing those findings together into a new *modus vivendi* for practical affairs.

Research is increasing rather than decreasing the need for philosophical work. This cannot be too emphatically nor too insistently asserted. The more science we have, the more we need philosophy—and especially in progressive times like these. Far from being a symptom of intellectual stagnation, philosophical work is the indispensable prerequisite to a successful realignment. If philosophers work with viable minds, they deserve their full measure of appreciation.

FINNEY, ROSS LEE, *A Sociological Philosophy of Education* (New York, Macmillan, 1928), pp. 13-14.

66

The Value of Philosophy

The value of philosophy is, in fact, to be sought largely in its very uncertainty. The man who has no tincture of philosophy goes through life imprisoned in the prejudices derived from common sense, from the habitual beliefs of his age or his nation, and from convictions which have grown up in his mind without the co-operation or consent of his deliberate reason. To such a man the world tends to become definite, finite, obvious; common objects rouse no questions, and unfamiliar possibilities are contemptuously rejected. As soon as we begin to philosophize, on the contrary, we find, as we saw in our opening chapters, that even the most everyday things lead to problems to which only very incomplete answers can be given. Philosophy, though unable to tell us with certainty what is the true answer to the doubts which it raises, is able to suggest many possibilities which enlarge our thoughts and free them from the tyranny of custom. Thus, while diminishing our feeling of certainty as to what things are, it greatly increases our knowledge as to what they may be; it removes the somewhat arrogant dogmatism of those who have never travelled into the region of liberating doubt, and it keeps alive our sense of wonder by showing familiar things in an unfamiliar aspect.

Apart from its utility in showing unsuspected possibilities, philosophy has a value—perhaps its chief value—through the greatness of the objects which it contemplates, and the freedom from narrow and personal aims resulting from this contemplation. The life of the instinctive man is shut up within the circle of his private interests; family and friends may be included, but the outer world is not regarded except as it may help or hinder what comes within the circle of instinctive wishes. In such a life there is something feverish and confined, in comparison with which the philosophic life is calm and free. The private world of instinctive interests is a small one, set in the midst of a great and powerful world which must, sooner or later, lay our private world in ruins. Unless we can so enlarge our interests as to include the whole outer world, we remain like a garrison in a beleaguered fortress, knowing that the enemy prevents escape and that ultimate surrender is inevitable. In such a life there is no peace, but a constant strife between the insistence of desire and the powerlessness of will. In one way or another, if our life is to be great and free, we must escape this prison and this strife.

RUSSELL, BERTRAND, *The Problems of Philosophy* (Home University Library of Knowledge, No. 35; New York, Holt, no date), pp. 242-245.

67

Connection Between Education and Philosophy

It is evident that there is an intimate connection between education and philosophy. This view is justified by history. If we turn to the eminent philosophers, such as Plato, Locke, Kant, and Spencer, who have written on education, we find that their educational doctrines were, in the main, an application of their philosophical opinions. To them education was chiefly an agency for advancing a certain philosophy, until the last few decades.

At present there is, perhaps, less sense of contact and mutual dependence between these two subjects than at any previous time. Various causes have led up to this result. For one thing, the development of science and of scientific method gave a tremendous impetus to educational investigations that had no direct connection with philosophic theory.

If education is to have a worthy part in this development, it must have a clear realization of the issues and a definite sense of direction. It may be freely conceded that the estrangement between education and philosophy has had certain compensations. The sense of freedom from tutelage and from the traditions of the past has brought to education a certain exhilaration and the disposition to observe and experiment. The conviction, though mistaken, that the problems of education could all be solved through the application of scientific method gave a powerful impetus to investigation and resulted in the acquisition of a most valuable body of organized knowledge. But in the emphasis upon statistics, methods, measurements, and practicality, the significance of ideals and appreciations has become obscure. There is danger of overlooking the big issues in fatuous admiration of our achievements in detail. Unless we know where we are going there is not much comfort in being assured that we are on the way and traveling fast. The result is likely to be that much of our progress is but seeming. We do not escape from the bondage of the past merely by issuing an Emancipation Proclamation. The old contrast between the cultural and the practical has tended to persist, with little appreciation of the fact that the cultural could be practical or that the practical could be cultural. Vocational subjects on the one hand, and literature and science on the other, are still left too much without a significant social context; and to the extent that this is the case, the aims of culture are defeated and the ideal of democracy is left to take care of itself.

If education is to discharge its rightful function of leadership, it must clarify its guiding ideals. The present is full of opportunity. Education has assumed a magnitude and importance that it never had before. The position of leadership has been thrust upon it. It has become in an emphatic sense the guardian of the future, and there is no way by which it can measure up to its responsibility and opportunity except through the cultivation and propagation of an attitude or spirit that will make men more human and life more rich and beautiful.

BODE, BOYD H., *Fundamentals of Education* (New York, Macmillan, 1921), pp. 224-225, 241-242.

68

The Question of the Philosophy of Education

From this definition of its method it is apparent that the question of the philosophy of education is this, what are the implications of education? What does the empirical nature of education as already defined through the related sciences of fact suggest as to its ultimate nature? Philosophy has no new educational facts to present; it asks only concerning the significance of the facts already in. It takes our educational experience, already narrated, as given, and concerning so notable a matter of human life, it reflectively inquires as to its meaning. Just as there is a philosophy of art, religion, the state, human conduct, etc., so is there a philosophy of education. Like these other departments of human life, education has its own facts suggesting meanings in their own way. Its facts, of course, are like other facts in that they are closely woven into our unitary human life; and the meanings they suggest in their own characteristic way ought also to fit in harmoniously with the meanings already wrought out in the philosophies of other subjects. All facts ultimately mean the same, but they mean the same in their own unique way; just as signboards on different roads leading to the same city point by different ways to the same goal. Reality is the heavenly city of philosophy and education is one of its signboards.

What then is the reality as indicated by education? Attempting first to put the facts of education all together so as to view them as one, two things are seen, viz., education is a world-process, and it is a temporal process. Education is a world-process; it is the world at work developing a man into the fulness of his stature. Philosophy with its inclusive view makes us return at once to the broad conception of education as defined in the first chapter; all the experiences of life, as well as those of the school, go into the development of man. Just as it takes all the creative powers in the acme of their exercise to make a man, so it takes all the influences of life to develop a man. Unimaginable ages of creative effort preceded the birth of a human child; unimaginable ages of educational effort must succeed his birth to round out man's power. The heart of humanity in which eternity is set, the mind of man with its eye opened to the infinite, have in our brief span of historic time not yet begun to disclose all their latent secrets to the genial and generous influences of their increasingly educational environment. Education is the process whereby human kind is working out into fruition its own inner nature; it is man's means of realizing his destination, of reaching his goal of largest power, joy, and service. It is a narrow though valuable sense of the term which limits the meaning of education to the influence of the school consciously brought to bear through the agency of the teacher upon the pupil; in the broadest, truest sense of the term, it is the sum total of the influences of life that educate a man.

HORNE, HERMAN HARRELL, *The Philosophy of Education* (New York, Macmillan, 1927), pp. 258-260.

69

Epicurus on Philosophy

"Let no one delay to study philosophy while he is young, and when he is old let him not become weary of the study; for no man can ever find the time unsuitable or too late to study the health of his soul. And he who asserts either that it is not yet time to philosophize, or that the hour is past, is like a man who should say that the time is not yet come to be happy, or that it is too late. So that both young and old should study philosophy, the one in order that, when he is old, he may be young in good things through the pleasing recollection of the past, and the other in order that he may be at the same time both young and old, in consequence of his absence of fear for the future."

BAKEWELL, CHARLES MONTAGUE, *Source Book in Ancient Philosophy* (New York, Scribner, 1907), p. 296.

70

Philosophy and Life

Artificially, and by an effort it is true, one may divorce one's life from one's announced philosophy—may hold, for example, to egoistic hedonism as the justified philosophical system while one lives a life of self-sacrifice, or may combine the most arrant self-indulgence with a rigorous, ethical doctrine. Ideally, however, as we all admit, and actually always to a certain degree, our philosophy "makes a difference"; it affects conduct; it moulds the life of personal relations. Philosophy is, in other words, a phase of life, not an observation of life from the outside; and the more adequate the philosophy, the more consistent the life may become. To provide a sound theoretical foundation for noble living, to shape and to supplement conduct by doctrine, becomes, thus, the complete aim of the philosopher, whose instinct and whose duty alike impel him to search for ultimate truth.

CALKINS, MARY WHITON, *The Persistent Problems of Philosophy* (New York, Macmillan, 1917), pp. 12-13.

CHAPTER III

Naturalism in Education

THE material contained in this chapter deals with naturalism as a philosophy, and some of the implications of the naturalistic tendency in education. The selection from Perry (71) is a concise statement regarding naturalism in its modern historical setting. The selections from Hocking (72) and Perry (73) set forth the meaning of naturalism. In the quotation from Rusk (76) we have a criticism of the naturalistic interpretation of human life. Rousseau (84), who is frequently referred to as the father of naturalism in education, was not naturalistic in the philosophical sense of the term. For him nature was not opposed to reason or spirit, but to convention, typified by society as he conceived it. The quotation from Munroe (86) defines natural education in its best sense.

Some of the selections found in this chapter are intended to serve as a critique of naturalism of both the materialistic and positivistic types. The student should read the chapter carefully and then answer for himself the question whether naturalism furnishes an adequate basis for a philosophy of education and of life.

71

Naturalism in Its Modern Historical Setting

The metaphysical impulse communicated by Kant took two forms. In his recognition of the thing-in-itself behind appearances, in his provision under the form of faith for God, freedom and immortality, and in his qualified assent to a purposive and aesthetic interpretation of nature, he encouraged the revival of a *spiritualistic realism* after the manner of Leibniz. In his doctrine of the organizing and creating activity of the knowing mind, through its forms of sensibility, its categories of understanding and its ideals of reason, he founded modern *idealism.* Each of these forms of post-Kantian metaphysics proved capable of great diversification in the course of their later history both in Germany and abroad. The rival movement was *naturalism,* or the philosophy inspired by the progress of the physical sciences. This influence of science on philosophy took two forms, according as attention was directed to the content of science or to its form. *Materialism* adapted the content of physics to the purposes of metaphysics, or employed particular scientific theories, such as the conservation of matter and force, or evolution, as an account of reality. *Positivism,* on the other hand, held that science alone provided knowledge. This unique cognitive success of science was attributed by some to its dealing with the facts of experience, and by others to its experimental technique and manner of formulating laws. The first of these interpretations of scientific knowledge furnished the motive of *empirical* positivism, and was peculiarly congenial to the tradition of English thought; the second constituted the motive of *methodological* positivism and was relatively characteristic of Germany and France. Naturalism of both varieties turned human hope and aspiration away from the supernatural world and focussed them upon man and *society.* Hence the growth of naturalism was accompanied by the scientific study of society (sociology), and by the formulation of programs of social reform.

WEBER, ALFRED, and PERRY, RALPH BARTON, *History of Philosophy* (New York, Scribner, 1925), pp. 458-459.

72

What Naturalism Is

Naturalism is the type of metaphysics which takes Nature as the whole of reality. That is, it excludes whatever is supernatural or otherworldly. Whatever appears independent of natural law, such as human life or the products of imagination, is really a part of the scheme of nature: everything comes from nature and returns to nature. No doubt there is something hidden, something for which science has to search, but that hidden thing is nature itself, not anything beyond or behind nature.

What is this all-inclusive "nature"? Nature may be defined as the sum of things and events in space and time, subject to a single system of causal laws.

There are different varieties of naturalism, according to the differing conceptions of what these things in space and time, in the ultimate analysis, are. If, as was formerly the case, they were considered as atoms of matter in motion—every phenomenon being in reality just that—we have materialism. If matter itself is regarded as a form of energy, and everything else is thought reducible to some form of energy, we have energism. Or if we refrain from deciding what the ultimate stuff of the world is, but insist that everything that is real is linked up with other things in causal order, and therefore comes under the observation of some one of the positive sciences, we have positivism.

Materialism is sometimes used as a general name for all such views as these, equivalent to naturalism. It implies simply the explanation of the crude phenomena of experience by the eternal flux of motions of the ultimate entities of the world in the impalpable medium of space. There is nothing "crass" about this view: these ultimate realities in any case are of inconceivable fineness, more like light rays in their essence than like the clod; and to their infinitely subtle pulsations mathematical enquiry, though it may be baffled, is always relevant. For, at least in the traditional picture, there is an impeccable lawfulness in the minutest crevices of nature.

Hocking, William E., *Types of Philosophy* (New York, Scribner, 1929), pp. 43-44.

73

Naturalism and Natural Science

By naturalism is meant the philosophical generalization of science—the application of the theories of science to the problems of philosophy. Both philosophy and science have, as we have seen, a permanent and institutional character. Each has its own tradition, its own classic authorities, and its own devotees. But naturalism proposes to make the institution of science serve also as the institution of philosophy. This attempted unification of knowledge is perennial. Each epoch of European thought has had its characteristic variety of naturalism; in which its favorite scientific theories have been used to satisfy its peculiar philosophical needs. Thus the atomic theory of the ancients, the mechanical theory of the seventeenth and eighteenth centuries, and the "energetics" of more recent times, have each in turn been presented in the form of a Weltanschauung or general view of life.

The scientist proper, the man of special research, becomes a naturalistic philosopher only when he acts in a new capacity. As scientist, in the strict sense, he is non-committal with reference to philosophical problems. He adopts and employs a technique which is authorized by the consensus of experts within his own field. His problems are the unsolved problems of his forerunners and fellow-workers; his method, a variation or refinement of methods which have already proved fruitful. He is not troubled by the supposed paradoxes of space and time, or by such problems as the nature of causality, the unity of the world, and the meaning of truth. He moves, in short, within intellectual limits which he does not question, and of which he may be even unconscious. But a scientist is also a man, and hence may readily become a philosopher as well. In hours of unprofessional meditation, his mind may turn to those more ultimate problems which are perpetually pressing for solution. And he may then assert that the solution of these problems lies in the application of the discoveries of science. Such an assertion he cannot prove in his laboratory; he can justify it only after the manner of the philosopher. The principal source of naturalism lies in this disposition of scientists, not infrequently men of weight, to assume the role of philosophers, and to carry with them into the forum of philosophy the traditions and hypotheses with which they are already familiar.

There is a less evident, though scarcely less important, source of naturalism in the popularization of science. When science is diffused, and transmuted into the form of common sense, it is almost invariably merged with philosophy. As a rule it is not substituted for theories emanating from philosophical sources, but is held along with them. Common sense has no nice regard for the spheres of the several branches of knowledge, and no repugnance whatsoever to contradictions. The mechanical and the spiritual theories of man, or the hypothesis of cosmic evolution and of divine creation, are accepted in the same sense and accorded equal weight; the one being learned from popular science, and the other from the pulpit. There is, furthermore, as we shall presently see, a peculiar readiness on the part of the vulgar mind to fall in with the naturalistic view of things, and to regard it as prior to all other views. For the naturalistic view is, in a certain respect, the same as the "practical" view, and has a source in organic habit independently of the diffusion of science.

PERRY, RALPH BARTON, *Present Philosophical Tendencies* (New York, Longmans, 1929), pp. 45-46.

74

The Negations of Naturalism

The peculiar force of naturalism lies in what it denies. The imaginative fringe added to the field of sense-experience by religious speculation shrinks to the dimensions of what can, in principle, be measured and controlled; and the whole metaphysical horizon is at once limited and simplified.

The disappearance of the "other world" implies that there is no God (unless Nature itself or Humanity can serve as an object of worship). There is no immortality nor any sort of survival of death, unless the lasting effects of one's life and doings, or the cherishing of one's memory by later generations, can serve as a sort of immortality. There is nothing in the human being more than what he derives from the natural causes which have produced him. If we mean by "soul" something in man distinct from nature, there is no soul.

Since there is nothing to intrude upon the regular processes of nature, miracle and providence are excluded; and prayer becomes a meaningless performance, unless one keeps it up for aesthetic or disciplinary or therapeutic effect.

And there can be no "freedom of the will," if one means thereby a capacity in man of deviating from the line fixed by the causal processes which flow into him and out of him. Naturalism implies determinism. "The laws which govern man's behavior are the same as the laws of the movements of the stars and the atoms." You have the feeling of free decision, looking forward: you say, "I have not yet decided what I shall do." Your atoms have decided, together with the rest of the world: you will do what you must.

If freedom means doing as you choose, you are free. But, as Spencer reminds you, you always do as you please; you cannot do anything else. That is where nature has you: what you please to do is what nature has caused you to please. "You can do as you please; but you cannot please as you please." Your preference is the means whereby nature works her will in your behavior.

Finally, conscious reason is not one of the original and permanent facts of the world. The kind of mentality we have in human beings is a transitory feature of things, evolved out of lower organisms, and probably ultimately out of completely inanimate things. (Haeckel believes that some primitive form of consciousness everywhere accompanies matter; so that mind and matter are eternal in every atom. This kind of mentality is of course not rational; and the view itself is not widely shared among naturalists.) And so far as we can see, reason will again flicker out into the inanimate. The enduring realities do not think nor plan: there is no reason nor purpose for the world as a whole.

HOCKING, WILLIAM E., *Types of Philosophy* (New York, Scribner, 1929), pp. 44-46.

75

Two Varieties of Naturalism

Naturalism, as we have seen, is not science, but an assertion about science. More specifically, it is the assertion that scientific knowledge is final, leaving no room for extra-scientific or philosophical knowledge. Naturalism assumes two forms. On the one hand there is a variety of naturalism which adopts the traditional problems, and to a large extent the traditional methods, of philosophy. It continues, e.g., the philosophical search for a universal substance and a first cause, and claims to have discovered these in some such scientific concept as "matter" or "force." The second variety of naturalism repudiates not only the solutions of the traditional philosophy, but the problems and methods as well. It condemns the search for universal substance and first cause as futile. Its last word is a theory of knowledge, in which science is asserted to be final because the only case of exact knowledge. In other words, the second variety of naturalism claims less for the concepts of a science, but nevertheless claims all. Science is not only the knowledge that has been dreamed of, but it is the only knowledge that is possible. The first variety of naturalism is metaphysical, the second proclaims its "anti-metaphysical" character. Or the first may be called "materialism," and the second "positivism."

PERRY, RALPH BARTON, *Present Philosophical Tendencies* (New York, Longmans, 1929), p. 63.

76

Naturalism in Psychology and Education

The naturalistic interpretation of human life has likewise dominated, and thereby prejudiced, much recent educational psychology. The great activity characteristic of American education has resulted from a philosophy and psychology the limitations of which are only now revealing themselves. . . . It presupposes a purely mechanistic view of life; meeting a situation is its highest ideal, and a chance success its ultimate explanation. Its analogies it derives from the responses of the lower animals in quite artificial situations, and its principles are Thorndike's laws of learning reduced to their lowest terms. The result is merely a discipline by natural consequences expressed in psychological terms. . . .

Naturalism, we may conclude, looks to the past for the cause and explanation of human activity, is content to take things as it finds them and to make the best of them, emphasizes individual assertion as against social co-operation, makes for a stereotyped instead of a progressive conception of society. In Education it fails to develop respect for conscience and to encourage responsibility for social well-being; it regards man's highest aspirations as illusions; and it subverts the confidence that arises from the feelings that man in his noblest efforts is co-operating with the Divine.

Rusk, Robert R., *Philosophical Bases of Education* (Boston, Houghton Mifflin, 1929), pp. 54, 64.

77

Man Is More Than a Beast

During the last century science rediscovered for us that in respect to our bodies we were animals and from the animals. This was a great discovery. We have dwelt upon it and talked about it and taught it to our youngsters, with marvelous forgetfulness that because we are beasts it does not of necessary logic follow that we are nothing but beasts. If you tell a generation, from babyhood through the university, that it is animal, and fail to tell it about the parts of human living which are not animal, it is apt to believe what it has been taught. And it is partly at least for that reason that in the ears of a generation so taught, as ours has been, the higher humanitarianism is apt to sound supremely silly. A generation which sought not to love God, but in His place to enthrone man, finds that it has children who refuse to honor man either. . . .

Our children are saying—maybe some of us are—what the cynical author of Ecclesiastes said long ago, "That which befalleth the sons of men is that which befalleth the animals—the same thing to both. As the one perishes, so perishes the other. Man hath no preëminence above the beasts. All is foolishness."[1]

What is to be said about all this? The thing that needs to be said about it is that it is both buncombe and a bore. We must admit, of course, that man is a beast. That is where he starts from. The thing that always has distinguished him, however, from the rest of the beasts—the thing which the cynicism of the moment forgets—is that man has not been and is not content to remain on that beastly level. He is ever struggling toward a kind of living, a set of values, that are not beastly at all. He is bent on discovering some queer thing called Truth, for instance. To get toward it he will deny animal urges and rewards. He will starve for it, slave for it, suffer for it, die for it—and count himself happy to have had the chance. The modern behaviorist may call him a fool for his pains. . . . But he will do it and rejoice in it. He will value Truth higher than wealth or popularity. And when he does deny the quest and behaves as a rational animal would behave, it makes him miserable and he knows that he is a cad. Beasts who are only beasts do not behave that way. Man also, starting on the beast level, pursues a thing he calls Beauty. The funny fellow cannot even tell you what Beauty is. It is a will-o'-the-wisp, but he struggles toward it. He even tries to copy and express it, in what he calls the Arts. To show forth one tiny bit of it he will endure privations, bitter ones. And whenever he gives up the search for it, if he does, he knows himself for a poor thing and hates his own abandonment. In the pursuit of this Beauty he knows lies a part at least of his destiny. This is not characteristic of beasts who are nothing but beasts. And man also, starting from the level of the beast, pursues Goodness in guise of Love—not merely love in a physical or mating sense, . . . but love as a passionate surrender of himself, a sacrifice of his own happiness to others, that in his dying there may be for them new life. And man, starting from the level of the beasts, pursuing Truth, Beauty, Love, has perceived that these are attributes of a great Reality—for the perfectness of which his heart is hungry. He calls this Reality "God," and he knows that when he turns toward this Reality he somehow is lifted into a being more real than beastly being.

---

[1] *Ecclesiastes,* 3:19.

All this is a part of human experience, and yet the modern cynic would seem to scorn it. All human history cries that life is a search for a Reality far beyond us. It is that struggle which makes life the magnificent adventure that it is. The cynic denies the reality of the struggle, because forsooth it is a struggle. Because man has not arrived, he shouts that man has never started. To him all man's good dreams are nightmares. To his mind man is less worthy than the beasts; he is a beast who, alone among beasts, supposes in a ridiculous idiocy that he is not a beast. From the point of view of logic, common sense, pragmatic test, and fact, the whole of this position, despite its scientific pretensions, seems foolishness. Happily there are many who realize this foolishness. What can be done for them?

Bell, Bernard Iddings, *Beyond Agnosticism* (New York, Harper, 1929), pp. 23-24, 26-29.

78

Knowledge Heading Towards a Non-Mechanical Reality

Today there is wide measure of agreement, which on the physical side of science approaches almost to unanimity, that the stream of knowledge is heading towards a non-mechanical reality; the universe begins to look more like a great thought than like a great machine. Mind no longer appears as an accidental intruder into the realm of matter; we are beginning to suspect that we ought rather to hail it as the creator and governor of the realm of matter—not of course our individual minds, but the mind in which the atoms out of which our individual minds have grown exist as thoughts.

The new knowledge compels us to revise our hasty first impressions that we had stumbled into a universe which either did not concern itself with life or was actively hostile to life. The old dualism of mind and matter, which was mainly responsible for the supposed hostility, seems likely to disappear, not through matter becoming in any way more shadowy or insubstantial than theretofore, or through mind becoming resolved into a function of the working of matter, but through substantial matter resolving itself into a creation and manifestation of mind. We discover that the universe shows evidence of a designing or controlling power that has something in common with our own individual minds—not, so far as we have discovered, emotion, morality, or aesthetic appreciation, but the tendency to think in the way which, for want of a better word, we describe as mathematical. And while much in it may be hostile to the material appendages of life, much also is akin to the fundamental activities of life; we are not so much strangers or intruders in the universe as we at first thought. Those inert atoms in the primeval slime which first began to foreshadow the attributes of life were putting themselves more, and not less, in accord with the fundamental nature of the universe.

JEANS, SIR JAMES H., *The Mysterious Universe* (New York, Macmillan, 1931), pp. 158-159.

79

Naturalism A Cause of Pessimism

There are several great causes of intellectual, emotional, and volitional pessimism, disregarding for the moment the pessimism of mood. Among these, those which characterize our age are naturalism and realism. It would seem that naturalism ought to be the friend of hope. When it becomes tinged with religion and arrives at pantheism it says with Pope: "Whatever is is good." There is no room for the distinction of good and evil where any kind of pantheism rules. But the actual naturalism, either neglecting its pantheistic consequence or contradicting it, takes the real world as one of absolute necessity. Man seeking the outlook of hope does not find it but is always subject to inexorable law. The desire for freedom is a deception. Morals and religion are really illusions in a universe of mere forces and energies. Where men think and feel themselves constrained to accept the conclusions of natural science alone as fundamental and ultimate they must abandon moral and spiritual values. Then bowing to the inescapable reign of iron natural law they grow sad, weary and hopeless when the cry of their heart calls for goodness and its liberty.

No one has better voiced the hopelessness of naturalism than Matthew Arnold in his poem Dover Beach. He hears faith's

> Melancholy, long, withdrawing roar,
> Retreating to the breath
> Of the night-wind, down the vast edges drear
> And naked shingles of the world.

HAAS, JOHN A. W., *Freedom and Christian Conduct* (New York, Macmillan, 1923), p. 73.

80

Science Reveals Only Mysteries

I am quite sure that Truth, the Meaning of things, the everlasting Reason Why, cannot be arrived at by any man through reason when it acts solely upon such evidence as is furnished by science. Science reveals to us mysteries ever more vast, but only mysteries for all their vastness. I am sure that most of our sad modern discouragement comes from depending too largely upon this impossibly inadequate data. By science, unless it be supplemented, I am left as truly ignorant about the meaning of time, space, man, life, death, as certainly unaware of the meaning of myself, as ever were my ancestors in any generation. I know this, not only because my own small scientific knowledge points that way, but also because every outstanding scientist that I have ever met has assured me that in this respect I am quite right. Human reason is not in itself an agency by which man discovers anything; but is, rather, the intellectual faculty by which man arranges in some sort of order the data which he has managed to accumulate by experience and observation. Knowledge is enlarged only by the gaining of new material upon which reason may go to work. Without adequate experience reason is powerless to arrive much of anywhere. Since scientific experience confessedly reveals nothing ultimate, it is to other and supplementing sorts of experience that I must go for data sufficient for the making of a life philosophy.

BELL, BERNARD IDDINGS, *Beyond Agnosticism* (New York, Harper, 1929), pp. 164-165.

81

Christ and Externalism

There can be no doubt that He would have condemned the externalism both of modern civilisation and of the political remedies advocated as a cure for its evils. The remedies of the Socialists are purely and aggressively environmental; they run counter to one of the profoundest maxims in the Gospel, that which bids us clean first the inside of the cup. Christ would have agreed with Herbert Spencer's epigram, "There is no political alchemy by which you can get golden conduct out of leaden instincts." So strong is His emphasis on the worthlessness of any improvement which is merely external and not intrinsic, that the eugenists have, not without reason, claimed Him as in full agreement with their principles.

INGE, WILLIAM R., *Christian Ethics and Modern Problems* (New York, Putnam, 1930), pp. 62-63.

82

Mechanism, Organism, and Purpose

There are three conceptions by which cosmologies have been built. They are Mechanism, Organism, and Purpose. The new cosmology is showing us that the concept of mechanism, while it is likely always to remain pragmatically valuable, is inapplicable to the ultimate data of physics. Hence the notion of mechanism has been replaced by that of mathematical symbolism. For building our cosmologies, then, there remain the leading concepts of Organism and of Purpose. We have seen that the concept of organism has a significant application to the cosmos. Whitehead is showing us that there is a correlation in the universe between microcosm and macrocosm which is organic in character. But we also have seen that the concept of organism is not all-sufficient for cosmology. Particularly in the human realm there is such an absence of harmony, and such a measure of positive discord, as to make the concept of organism unilluminating in respect to great bodies of fact. At the same time we have pointed out that there are ranges of fact and event which are super-organic, namely those ranges where purposefulness appears. Now the concept of purpose implies three things—a basic existing order, the apprehension of values not embodied in the existing order, and activity directed toward bringing those values into existence. Purpose brings into significant correlation our experience of order, and of potentiality, and of ideal value. Thus a fuller synthesis of the aspects and meanings of the cosmos is attainable through the idea of a Cosmic Creative Purpose than through the idea of mechanism or the idea of organism. The new cosmology points to theism, and may derive from theism the ultimate concepts for its synthetic task.

But the theism which may hope to complete the new cosmology will be in many respects a new theism. It will be a theism which will include the fact that, although mechanism is not the ultimate truth for science, and still less for philosophy, it has its relative truth. That is, the universe has such a character that many of its phenomena can be expressed with a high degree of accuracy in terms of mechanism—or in other and more suitable words, the universe has its metrical aspect. This universe with its metrical aspect, the new theism, like the old, will find to be illuminated by our vision and present possession of eternal values. But the new theism will bring mathematical order and eternal values into more significant and effective unity through the recognition of Creativity as basic to the universe and as being omnipresent, in varying degrees, in its processes. Thus, as compared with the ethical theism of the recent past, the new theism will be able to show for the eternal values a more significant relevance to the existing world, because it will not merely postulate that relevance, but disclose it in actuality by showing how both the existing order and the potentiality of a far richer and higher order are grounded in the working of a Cosmic Creative Spirit.

LYMAN, EUGENE W., *The Meaning and Truth of Religion* (New York, Scribner, 1933), pp. 285-287.

83

The Foundations of Natural Knowledge

I cannot but think that the foundations of all natural knowledge were laid when the reason of man first came face to face with the facts of Nature; when the savage first learned that the fingers of one hand are fewer than those of both; that it is shorter to cross a stream than head it; that a stone stops where it is unless it be moved; and that it drops from the hand which lets it go; that light and heat come and go with the sun; that sticks burn away in a fire; that plants and animals grow and die; that if he struck his fellow-savage a blow it would make him angry; and perhaps get a blow in return, while if he offered him a fruit he would please him, and perhaps receive a fish in exchange. When men had acquired this much knowledge, the outlines, rude though they were, of mathematics, of physics, of chemistry, of biology, of moral, economical, and political science, were sketched. Nor did the germ of religion fail when science began to bud.

HUXLEY, THOMAS H., *Lay Sermons* (New York, Appleton, 1890), pp. 11-12.

84

Education Comes from Nature, Men, and Things

Coming from the hand of the Author of all things, everything is good; in the hands of man, everything degenerates. Man obliges one soil to nourish the productions of another, one tree to bear the fruits of another; he mingles and confounds climates, elements, seasons; he mutilates his dog, his horse, his slave. He overturns everything, disfigures everything; he loves deformity, monsters; he desires that nothing should be as nature made it, not even man himself. To please him, man must be broken in like a horse; man must be adapted to man's own fashion, like a tree in his garden.

We are born weak, we need strength; we are born destitute of all things, we need assistance; we are born stupid, we need judgment. All that we have not at birth, and that we need when grown up, is given by education.

This education comes to us from nature itself, or from other men, or from circumstances. The internal development of our faculties and of our organs is the education nature gives us; the use we are taught to make of this development is the education we get from other men; and what we learn, by our own experience, about things that interests us, is the education of circumstances.

Each of us is therefore formed by three kinds of teachers. The pupil in whom their different lessons contradict one another is badly educated, and will never be in harmony with himself; the one in whom they all touch upon the same points and tend toward the same object advances toward that goal only, and lives accordingly. He alone is well educated.

In the natural order of things, all men being equal, the vocation common to all is the state of manhood; and whoever is well trained for that, cannot fulfil badly any vocation which depends upon it. Whether my pupil be destined for the army, the church, or the bar, matters little to me. Before he can think of adopting the vocation of his parents, nature calls upon him to be a man. How to live is the business I wish to teach him. On leaving my hands he will not, I admit, be a magistrate, a soldier, or a priest; first of all he will be a man. All that a man ought to be he can be, at need, as well as any one else can. Fortune will in vain alter his position, for he will always occupy his own.

Our real study is that of the state of man. He among us who best knows how to bear the good and evil fortunes of this life is, in my opinion, the best educated; whence it follows that true education consists less in precept than in practice. We begin to instruct ourselves when we begin to live; our education commences with the commencement of our life; our first teacher is our nurse. For this reason the word "education" had among the ancients another meaning which we no longer attach to it; it signified nutriment.

ROUSSEAU, JEAN JACQUES, *Emile* (translated by Eleanor Worthington; Boston, Heath, 1883), pp. 9, 12-14.

85

Influence of Materialism

Thus there can be little doubt that, the further science advances, the more extensively and consistently will all the phenomena of nature be represented by materialistic formula and symbols. But the man of science who, forgetting the limits of philosophical inquiry, slides from these formulas and symbols into what is commonly understood by materialism, seems to me to place himself on a level with the mathematician who should mistake the X's and Y's with which he works his problems, for real entities,—and with this further disadvantage as compared with the mathematicians, that the blunders of the latter are of no practical consequence while the errors of systematic materialism may paralyze the energies and destroy the beauty of a life.

Huxley, Thomas H., "Lay Sermons," in *Readings in English Prose of the Nineteenth Century* (Alden, editor; Boston, Houghton Mifflin, 1917), p. 587.

86

What a Natural Education Is

A natural education is not one, as is too often supposed, in which the child is left to grow up as he may, subject to the chances of his environment, a prey to his own inclinations. It is not one in which he is kept aloof from man, in a forced communion with non-human things. Neither is it one unwisely trusted to the instincts of a natural, but untrained affection. Still less is it one in which the old pedagogic drill in formal studies is thrown aside to give place to a pseudo-scientific playing, a vague and formless pottering with objective phenomena. The real "natural" education is that aimed at in the best endeavor of today, in which the child, from the moment of his birth, is steadily, rationally, and intelligently developed, by trained and sympathetic minds, towards the best manhood possible to him. Such an education is not simply mental; it is physical; above all, it is moral. In it, the child's individuality is preserved, but is pruned and guided; he himself furnishes the impulse towards his own development, but the channels in which this force acts, the ends towards which it directs itself, are determined for him. A natural education is one in which the subject taught is secondary to the manner of teaching; in which the task done is subsidiary to the effect of doing it; in which the question to be asked at the completion of an educational step is not, What has the child learned? but, What has the child become?

Munroe, James P., *The Educational Ideal* (Boston, Heath, 1896), p. 2.

87

Science and Philosophy

Science assumes that man's physical environment can be described and measured with precision and in simple objective terms. The real watchwords of the scientific method are isolation, fragmentation, and analysis. One cannot do better than turn to Ernst Mach's discussion of the scientific methods and their aims. He said that the world is composed wholly of homogeneous elements constantly changing their mutual relations. Certain relatively stable elements he called physical objects—others, minds or egos. Mach said, "It is the sole business of science to inquire into the connection and combination of these elements, for it is concerned only with the interdependence of phenomena. It does not seek to explain phenomena by referring them to purposes or hidden causes, but gives a simple and comprehensive account of the relations of dependence among phenomena."

A second great interpreter of science and its methods, Henri Poincaré, also emphasized the factor of technic with which the scientist is primarily concerned. He said that, "In discovering the laws of nature or of objective reality science relied upon experimentation which is a means to an end or a method, while morality and philosophy are concerned with ultimate ends or causes." Science, therefore, is chiefly a method, in contrast to philosophy, which attempts to integrate the results obtained by science into a systematic whole.

In order to show more clearly the aims and results of science as contrasted with philosophy, it will be necessary to examine a representative subject. Physics, for example, is illustrative of the exact sciences which deal with the material order as if it were a closed system of cause and effect. "In a field like physics, aesthetic, ethical, and spiritual aspects of the environment give way to qualities such as massiveness, substantiality, extension and duration, since the former cannot be submitted to exact measurement." The triumph of physics is primarily due to the numerical connections between "pointer readings" on various instruments. The physicist works out the exact connections between these "pointer readings" in measuring, for example, the properties of matter such as mass, stress, momentum, and potentiality. When these relationships are calculated, he has reached the limit of his task, for he neither needs to nor can go beyond such boundaries as accurate measurement prescribes. The virtue of working with closed systems or cycles of events as in physics is that there are no loose ends projecting outside the world of physics into the unknown.

In an attempt to determine what science has to contribute to a life philosophy, it has been shown, first, that science is chiefly concerned with the quantitative results obtained by the experimental methods, and second, that physics, typical of the exact sciences, deals with a closed system, turning a blind eye to the properties of mind and of values. Since the discoveries of the physicist will partially determine one's metaphysical position, it is essential that consideration should be given to his findings.

For a complete discussion of modern physical theories one must go directly to the works of scientists like Whitehead, Eddington, and Einstein. Here one need only say that relativity, the quantum theory, and other recent discoveries have confronted the physicist with an entirely new conception of the material world to that presented by the Newtonian theories which were held during the eighteenth and nineteenth centuries. Physics is now in the course of abandoning all claim to a type of knowledge of the entities with which it deals that twenty years ago it took for granted without hesitation. Eddington, for example, says that "The phenomenon with which the physicist now deals is considered to be ultimately a spiritual phenomenon yet it has the aspects of physical force."

This non-material aspect of matter is excluded from exact science because it cannot be measured by "pointer readings." The chain of connection of the physical entities is in the province of physics but the intrinsic essence of those entities is now recognized to be outside of its province. In other words the precise knowledge of the behavior of atoms leaves their intrinsic nature just as transcendental and inscrutable as the nature of mind. The findings of the physicist therefore are insufficient for the complete truth concerning the nature of the universe. Furthermore the facts which the physicist does reveal indicate that a metaphysical philosophy founded upon materialism would have a false basis.

Professor Whitehead from a background of mathematical physics has recently stressed the inadequacy of scientific materialism as an explanation of the facts of nature. He points to the astonishing success of such concepts in scientific research, but states, "It is quite unbelievable to conceive of nature as soundless, scentless, colorless, merely the hurrying of material, endlessly, meaninglessly."

On account of the inadequacy of scientific materialism, Professor Whitehead contends that the poets have comprehended the concrete events in nature more adequately than have the scientists. The poet finds himself continuous with the world of sounds, colors, and scents, and the evidence neglected by science is utilized in the total picture. The evidence afforded by poetic insight is, therefore, relevant to the philosophy of nature. In addition to this, Professor Whitehead substitutes the concept of "organism" for the "bits of material" of scientific materialism. In explaining what is meant by this organic conception of nature, he shows that it is unwise to accept mechanism throughout inanimate nature and assign or restrict vitalism to some form of living matter. This would result in an untenable dualism, implying a break in the continuity of nature for which there is no warrant. Hence so-called mechanism is replaced by the doctrine "that the whole concept of materialism, applied only to any abstract entities, is the product of logical discernment. In place of this is substituted the concrete event which is an enduring organism in which the plan of the whole influences the characters of the various subordinate mechanisms which enter into it."

In this fashion Professor Whitehead substitutes the concept of organic mechanism for scientific materialism and, in addition, those characters upon which the poets have laid stress are introduced into the philosophy of nature. Thus a place is left open for value as a fundamental concept of philosophy as well as a key to some ultimate metaphysical synthesis which as yet Professor Whitehead has not discussed. In regard to the general question of a philosophy of life it is evident that the exact sciences hold sway within the realm of natural law, but that natural law deals with a closed system beyond which the scientist has no authority. What about the science of the cellular processes and of human behavior?

McFarland, Ross A., "Is There A Scientific Philosophy of Life?" in *Religious Education* (Vol. XXIII, No. 2, pp. 110-112).

88

The Universe of Modern Physics

The tendency of modern physics is to resolve the whole material universe into waves, and nothing but waves. These waves are of two kinds: bottled-up waves, which we call matter, and unbottled waves, which we call radiation or light. If annihilation of matter occurs, the process is merely that of unbottling imprisoned wave-energy and setting it free to travel through space. These concepts reduce the whole universe to a world of light, potential or existent, so that the whole story of its creation can be told with perfect accuracy and completeness in the six words: "God said, 'Let there be light.'"

Jeans, Sir James H., *The Mysterious Universe* (New York, Macmillan, 1931), pp. 83-84.

89

Mechanism a Mode of Thinking, Not of Being

The conception of the Universe as an Infinite Machine is obviously metaphor; and though metaphors of this kind may be taken literally by the unreflective, thinkers recognise them as myth. It is otherwise with abstract terms. Of such terms Mechanism has proved one of the most delusive. Mechanism is the abstract conception which corresponds to the concrete thing machine; in origin it is a generalisation arrived at from the contemplation of actual machines. But every actual machine is a thing made by man for the attainment of some purely human end. Hence to use the term mechanism at all for the description of natural phenomena is to be guilty of anthropomorphism—if that be a matter of guilt—in a double degree. The anthropomorphism of religion interprets the Universe in terms of human personality—that is to say, in terms of the most remarkable natural product of that Universe. But mechanism is a conception doubly anthropomorphic, for it is derived from artificial constructions devised by human personalities for their own private uses.

The conception of Mechanism has been the master key of scientific discovery. Since, however, in origin it is a metaphor drawn from observation of machinery, it is of the first importance to beware lest illegitimate associations derived from its original non-scientific sense be allowed to creep unawares into its scientific usage. Otherwise an element of mythology will make its way into the citadel of Science. Now a machine is essentially an instrument; it is not in itself a creative power. It is a method by which creative thought seeks to attain ends clearly foreseen. It is something initiated by intelligence, controlled by a living agent and directed by purpose. Since then, the abstract idea of mechanism is reached by way of generalisation from actual machines, it ought properly to include all this. As a matter of fact, it is employed by Science expressly in order to exclude everything of the sort. If this were merely a question of the use of words, it would not matter. The scientist—provided he is careful always to define his terms—

has a right, like Alice's Humpty Dumpty, to make words mean what he chooses. But it is not legitimate to employ a word in an attenuated meaning and to expect at the same time to retain the "good-will," so to speak, of its old "connection." My point is this: an actual machine is a "going concern"; but it is that only because it was designed and is controlled by intelligence and purpose; leave out these and it is nothing at all. If then you explain Nature—which is also a "going concern"—in terms of mechanism while expressly excluding from the connotation of that word all reference to intelligence and purpose, you are explaining it in terms of something that never has existed and never could. Mechanism so conceived is pure symbol, it is simply a name for an abstract relation which has not corresponding to it any concrete object of which we have actual experience.

Now mathematicians constantly reach valuable results by making use of symbols, such as $\sqrt{-1}$, to which nothing in human experience is known to correspond. Physical Science is entitled to do the same; and it has done so, with conspicuous success, in the case of this conception of mechanism. Indeed it has been this conception more than any other that has thrown wide open to the human race the door of knowledge. But it is quite another matter to interpret the Universe as a whole in terms of mechanism, without asking for what the concept mechanism as used by Science really stands.

Science uses the concept of mechanism as a principle by means of which it is possible to co-ordinate innumerable observations dealing with moving bodies. In so far as any concept which reduces chaos to system may properly be called an explanation, it may be said to "explain" them. But it is not explanation in the same sense as when we find that some unknown thing is a member of a class of things already known, or when the unfamiliar is "explained" by its likeness to the familiar. If mechanism in scientific usage were really the equivalent in abstract thought of the concrete thing machine, then to discover mechanism in Nature would be to "explain" Nature in this sense. It would mean to discover that the obscure working of Nature has the closest resemblance to that familiar object of everyday life, a machine, that is to say, to something initiated by intelligence, controlled by a living agent and directed by purpose. Whereas, in fact, the mechanism of which the scientist speaks is an abstract idea which corresponds to the concrete object machine only if these essential characteristics of every actual machine are left out; that is to say, it resembles something that nowhere exists outside the mind of the scientist. Clearly this is not explaining the obscure working of Nature in terms of a familiar object of daily life, the unknown in terms of the known, but the contrary. It is explaining concrete observed fact by the aid of a conception which in the last resort is purely symbolic. In other words, mechanism, in its scientific use, is a mode of thinking; it is not a mode of being.

Streeter, Burnett Hillman, *Reality* (New York, Macmillan, 1928), pp. 11-13.

90

Difference Between a Person and a Mere Organism

We must now examine more closely the difference between the conception of a person or conscious organism and that of a mere organism as such. The higher organisms are evidently conscious, like ourselves, though they may be aware of far less than we are. As we go down the scale of organic life we gradually lose the evidences of consciousness. We can also find no signs of consciousness in the greater part of the organic activities of our own bodies. Mere organic activity is evidently blind or unintelligent. An organism as such is in constant relation with its environment, as we have already seen, but only in so far as the environment enters into its organic life. To this extent the action and reaction between organism and environment is determined as a part of organic activity. Apart from this, however, the mere organism is at the mercy of the physical environment: it is helplessly swept hither and thither and learns nothing from experience: the physical environment appears to be foreign to it in just the same sense as the environment of a portion of matter is foreign to it.

Biology as such does not give us any rational account of the tossings about of the organism in the sea of its apparent physical and chemical environment. All that biology can do is to reveal to us the blind organic activity which is the one element of constancy and intelligibility throughout these tossings; and the tossings themselves appear to us as nothing more intelligible than the aimless and irrational change in an aimless and irrational world of matter and energy.

For the conscious organism, on the other hand, the physical environment is no longer something merely external, but is perceived, however dimly, and reacted to, as of practical significance and yet outside of immediate organic determination. It is through the fact that in perception and volition the external world is in real connection with the internal organic world that conscious life or personality distinguishes itself from mere organic life.

We must, it seems to me, draw a sharp and clear distinction between biology, which deals simply with organic life, and psychology, which deals with conscious life or personality. This distinction is similar in general nature to that which I have already endeavoured to draw between physics and biology. Just as biology is a more concrete science, nearer to reality, than physics and chemistry, so psychology is a more concrete science than biology. We can abstract from the psychological aspect of a man or animal, and regard him only from the biological aspect. This is, in fact, what we do in physiology. In regard to most of the details of bodily activity there is little need for deliberate abstraction, since the psychological element lies only in the background. But when we come to deal with the bodily parts more immediately concerned in perception and voluntary response the case is very different. Perception, voluntary response, and conscious activity of every kind belong to personality, and therefore cannot as such be dealt with scientifically from the merely biological or physiological standpoint. We might as well attempt to establish physics on a basis which totally disregarded the facts on which the conceptions of mass and energy are based, as to establish psychology on a merely physiological basis. Physiological psychology, in so far as it is such an attempt, is nothing but a misbirth of modern times, inevitably doomed to perish, just as is bio-chemistry in so far as it is an attempt to establish physiology on a purely chemical basis.

Haldane, J. S., *Mechanism, Life and Personality* (London, Murray [American publisher, Dutton, New York], 1914), pp. 115-118.

91

Materialism a False Creed

In now bringing to an end this sketch, in which, far from meaning to exhaust the fulness of mental life, we have sought merely to indicate the main outlines of its internal connection, we would fain dwell on one point as the chief result of our considerations—namely, the conviction we have gained of the pervading difference separating the constitution of the inner life from the peculiar course of external Nature. Not only are its elements different from those of Nature,—consciousness, feeling, and will having no resemblance to the states which observation either shows us or compels us to infer in material bodies; but further, the modes of energy, those manifestations of a power to combine the manifold according to relations, with whose value we have become acquainted, have in them nothing analogous to the reciprocal actions which we can trace going on between the former. However much we may have become used, from the much higher point to which the physical sciences have been cultivated, to look on their fundamental conceptions as universally applicable means of investigation, we must nevertheless acknowledge that we have here entered on a new and wholly different sphere, whose peculiar nature requires us to accustom ourselves to new and special points of view. It would be a mistake to suppose this demand to be made in opposition merely to Materialism, which, denying as it does the independent nature of the mental being, must also in consistency decline the obligation to seek new modes of considering a subject which it does not recognize to be new; the tendency with which we find fault extends far more widely, even among those who, like us, base their views on the independent origin of spirit. We are so used in Nature to indirect effects and to their being explained by the consideration of single constituents, so used to find momentous differences in properties traced back to trifling alterations in the amount and mode of combination of homogeneous elements, that at last we lose all understanding of anything immediate, and unconsciously become possessed by a passion for construing everything, assigning to everything a complicated machinery as the means of its origination and operation. We would then fain assert that even within us there is nothing but an exterior concatenation of events, resembling the communication of movement by which, in the outer world, we see one element come into collision with another; and all else that we find within—consciousness, feeling, and effort—we would be almost tempted to regard as only a kind of accidental reflection in us of that real action, unless indeed we see that there must be something for which and in which this reflection arises. That something there is; every several expression of our consciousness, every stirring of our feelings, every dawning resolution, calls aloud that processes, not to be measured by the standard of physical notions, do indeed take place, with unconquerable and undeniable reality. So long as we have this experience, Materialism may prolong its existence and celebrate its triumphs within the schools, where so many ideas estranged from life find shelter, but its own professors will belie their false creed in their living action. For they will all continue to love and hate, to hope and fear, to dream and study, and they will in vain seek to persuade us that this varied exercise of mental energies, which even deliberate denial of the supersensible cannot destroy, is a product of their bodily organization, or that the love of truth exhibited by some, the sensitive vanity betrayed by others, has its origin in their cerebral fibres. Among all the errors of the human mind it has always seemed to me the strangest that it could come to doubt its own existence, of which alone it has direct experience, or to take it at second hand as the product of an external nature which we know only indirectly, only by means of the knowledge of the very mind to which we would fain deny existence.

LOTZE, HERMAN, *Microcosmus* (translated by Hamilton and Jones; New York, Scribner, 1885), Vol. I, pp. 261-263.

CHAPTER IV

Pragmatism in Education

THE readings in this chapter have been selected for the purpose of presenting, first, the meaning of pragmatism, second, a statement of the pragmatist position, and finally, a criticism of pragmatism as a valid philosophy of education and an ethical philosophy of life. Selection 92 is self-explanatory. The quotation from James (93) is a simple, clear, and fundamental statement of the biological pragmatic view of consciousness, and of the reasons for adopting this point of view. In selection 95 there is a good statement on pragmatism and the spirit of the age. The quotations from Dewey and Pratt (96, 97) further emphasize the significance of the pragmatic position. Other quotations in the chapter set forth the claim that pragmatism, in spite of its good points, does not furnish an adequate basis for sound educational practice and the highest type of ethical life. The student should read the chapter carefully and draw his own conclusions.

92

What Is Pragmatism?

What, then, is pragmatism? Primarily it is a criterion of truth. Speaking broadly and ambiguously at first, we may say that it is the theory that the test of the truth of all thinking is to be found in its practical consequences. If the practical consequences are satisfactory, the thinking is said to be true. This statement is, however, far from clear. Just what is meant by practical and by satisfactory? What seems practical to the burglar seems impractical to the moralist; what is satisfactory to the organic chemist is probably unsatisfactory to the college freshman. There are, on the whole, among pragmatists four outstanding conceptions of the meaning of these terms, practical and satisfactory. These may be called the humanistic, the experimental, the nominalistic, and the biological types. The types, to a degree, overlap. The same man may hold to more than one of them; but the classification will serve to bring preliminary order into a chaos of opinions.

The humanistic type is popularly best known. It holds that what satisfies human nature as a whole is true. The name humanism comes from the English pragmatist, Schiller, a prolific and brilliant writer. Much of James's pragmatism was humanistic. The humanist would say, Whatever fulfills my purposes, satisfies my desires, develops my life, is true. This assertion readily lends itself to caricature; for it is notorious how many of our desires cannot be fulfilled; how many of them, when fulfilled, lead to error and evil, instead of to truth. But if emphasis be laid on life as a whole, the position becomes more plausible; and it makes a wide popular appeal in that it can easily be grasped, and lends itself to ready support of religious beliefs. Postponing all criticism to a later point, we shall proceed to define the other types.

The experimental type of pragmatism is based on the laboratory methods of the sciences. It says, simply, Whatever can be experimentally verified is true; or, more simply still, What works is true. This conception of truth is employed by the sciences; moreover, if the term experiment be taken widely enough, this method would appear to have its application in every field. Can man fly in the air? What are the properties of radium? Is the Einstein theory true? Does God answer prayer? Is life worth living? Whatever our question, the reply would be one and the same, Try the necessary experiments and find out; *experientia docet*. There is no doubt that pragmatism in this form is voicing an important idea.

The type that we have called nominalistic may be regarded as a sub-form of the experimental type. Whenever we perform an experiment, we are looking for results. The experimental attitude is expectant, inquiring. Now, say many pragmatists, any idea is simply a prediction of certain expected, possible results. I say "red-apple-in-orchard," and mean that if I go to the orchard I shall see the red apple that I meant. These results are said by the nominalistic pragmatist always to be concrete particulars; nothing general, universal or abstract. A school of medieval philosophers held that *universalia sunt nomina,* and hence were called nominalists. So too the pragmatist of this stripe (such as James) asserts that universals are mere names for the particulars to which they may lead. When I say "Man," I do not mean any such monstrosity as a universal man or man-in-general; I mean only that the traits asserted of "Man" will be found in the actual, concrete men with whom I deal. If the traits are not there, the idea is not true. This kind of pragmatism is closely affiliated with sense experience as a criterion, for the particulars that we meet are mostly sense data (including, as James emphasizes, their relations).

The last type, the biological, is in the ascendancy at the present time. By this type, of which the outstanding representative is John Dewey of Columbia University, the pragmatic test is found in the function of thought in adapting the human organism to its environment. Biology has taught us to regard man as a psycho-physical organism; thought is an instrument for adjustment in any situation where difficulties or problems have arisen. To adapt an illustration from the Introduction to Reflective Thinking by Columbia Associates in Philosophy, we begin the day with habitual acts that require no thought (and so do not raise the issue of truth). But suppose we receive a letter in the morning mail containing a question that demands decision. We must then make up our mind what ought to be done; and this process is thinking. The truth of our thinking then would consist in the success with which it leads the organism to do that which will best answer the question. Because it regards thought as an instrument of adjustment, this view is often called instrumentalism. Because it was founded at the University of Chicago when Dewey was there, and because it is still growing at that university, it is often ascribed to the "Chicago School."

BRIGHTMAN, EDGAR SHEFFIELD, *An Introduction to Philosophy* (New York, Holt, 1925), pp. 51-54.

93

The Child as a Behaving Organism

I wish now to continue the description of the peculiarities of the stream of consciousness by asking whether we can in any intelligible way assign its *functions.*

It has two functions that are obvious: it leads to knowledge, and it leads to action.

Can we say which of these functions is the more essential?

An old historic divergence of opinion comes in here. Popular belief has always tended to estimate the worth of a man's mental processes by their effects upon his practical life. But Philosophers have usually cherished a different view. "Man's supreme glory," they have said, "is to be a *rational* being, to know absolute and eternal and universal truth. The uses of his intellect for practical affairs are therefore subordinate matters. 'The theoretic life' is his soul's genuine concern." Nothing can be more different in its results for our personal attitude than to take sides with one or the other of these views, and emphasize the practical or the theoretical ideal. In the latter case, abstraction from the emotions and passions and withdrawal from the strife of human affairs would be not only pardonable, but praiseworthy; and all that makes for quiet and contemplation should be regarded as conducive to the highest human perfection. In the former, the man of contemplation would be treated as only half a human being, passion and practical resource would become once more glories of our race, a concrete victory over this earth's outward powers of darkness would appear an equivalent for any amount of passive spiritual culture, and conduct would remain as the test of every education worthy of the name.

It is impossible to disguise the fact that in the psychology of our own day the emphasis is transferred from the mind's purely rational function, where Plato and Aristotle, and what one may call the whole classic tradition in philosophy had placed it, to the so long neglected practical side. The theory of evolution is mainly responsible for this. Man, we now have reason to believe, has been evolved from infra-human ancestors, in whom pure reason hardly existed, if at all, and whose mind, so far as it can have had any function, would appear to have been an organ for adapting their movements to the impressions received from the environment, so as to escape the better from destruction. Consciousness would thus seem in the first instance to be nothing but a sort of superadded biological perfection,—useless unless it prompted to useful conduct, and inexplicable apart from that consideration.

Deep in our own nature the biological foundations of our consciousness persist, undisguised and undiminished. Our sensations are here to attract us or to deter us, our memories to warn or encourage us, our feelings to impel, and our thoughts to restrain our behavior, so that on the whole we may prosper and our days be long in the land. Whatever of transmundane metaphysical insight or of practically inapplicable aesthetic perception or ethical sentiment we may carry in our interiors might at this rate be regarded as only part of the incidental excess of function that necessarily accompanies the working of every complex machine.

I shall ask you now—not meaning at all thereby to close the theoretic question, but merely because it seems to me the point of view likely to be of greatest practical use to you as teachers—to adopt with me, in this course of lectures, the biological conception, as thus expressed, and to lay your own emphasis on the fact that man, whatever else he may be, is primarily a practical being, whose mind is given him to aid in adapting him to this world's life.

In the learning of all matters, we have to start with some one deep aspect of the question, abstracting it as if it were the only aspect; and then we gradually correct ourselves by adding those neglected other features which complete the case. No one believes more strongly than I do that what our senses know as "this world" is only one portion of our mind's total environment and object. Yet, because it is the primal portion, it is the *sine qua non* of all the rest. If you grasp the facts about it firmly, you may proceed to higher regions undisturbed. As our time must be so short together, I prefer being elementary and fundamental to being complete, so I propose to you to hold fast to the ultra-simple point of view.

The reasons why I call it so fundamental can be easily told.

First, human and animal psychology thereby become less discontinuous. I know that to some of you this will hardly seem an attractive reason, but there are others whom it will affect.

Second, mental action is conditioned by brain action, and runs parallel therewith. But the brain, so far as we understand it, is given us for practical behavior. Every current that runs into it from skin or eye or ear runs out again into muscles, glands, or viscera, and helps to adapt the animal to the environment from which the current came. It therefore generalizes and simplifies our view to treat the brain life and the mental life as having one fundamental kind of purpose.

Third, those very functions of the mind that do not refer directly to this world's environment, the ethical utopias, aesthetic visions, insights into eternal truth, and fanciful logical combinations, could never be carried on at all by a human individual, unless the mind that produced them in him were also able to produce more practically useful products. The latter are thus the more essential, or at least the more primordial results.

Fourth, the inessential "unpractical" activities are themselves far more connected with our behavior and our adaptation to the environment than at first sight might appear. No truth, however abstract, is ever perceived, that will not probably at some time influence our earthly action. You must remember that, when I talk of action here, I mean action in the widest sense. I mean speech, I mean writing, I mean yeses and noes, and tendencies "from" things and tendencies "toward" things, and emotional determinations; and I mean them in the future as well as in the immediate present. As I talk here, and you listen, it might seem as if no action followed. You might call it a purely theoretic process, with no practical result. But it must have a practical result. It cannot take place at all and leave your conduct unaffected. If not to-day, then on some far future day, you will answer some question differently by reason of what you are thinking now. Some of you will be led by my words into new veins of inquiry, into reading special books. These will develop your opinion, whether for or against. That opinion will in turn be expressed, will receive criticism from others in your environment, and will affect your standing in their eyes. We cannot escape our destiny, which is practical; and even our most theoretic faculties contribute to its working out.

JAMES, WILLIAM, *Talks to Teachers* (New York, Holt, 1929), pp. 22-27.

94

In Defense of the New Humanism

In all but name *Humanism* has long been in existence. Years ago I described one of its most precious texts, William James's *Will to Believe,* as a "declaration of the independence of the concrete whole of man with all his passions and emotions unexpurgated, directed against the cramping rules and regulations by which the Brahmins of the academic castes are tempted to impede the free expansion of human life," and as "a most salutary doctrine to preach to a biped oppressed by many '-ologies,' like a modern man, and calculated to allay his growing doubts whether he has a responsible personality and a soul and conscience of his own, and is not a mere phantasmagoria of abstractions, a transient complex of shadowy formulas that Science calls 'the laws of nature.'" Its great lesson was, I held, that "there are not really any eternal and non-human truths to prohibit us from adopting the beliefs we need to live by, nor any infallible *a priori* tests of truth to screen us from the consequences of our choice." Similarly Professor James, in reviewing Personal Idealism, pointed out that "a re-anthropomorphized universe is the general outcome of its philosophy." Only for re-anthropomorphized we should henceforth read re-humanized. "Anthropomorphism" is a term of disparagement whose dyslogistic usage it may prove difficult to alter. Moreover, it is clumsy, and can hardly be extended so as to cover what I mean by Humanism. There is no need to disclaim the truth of which it is the adumbration, and a non-anthropomorphic thought is sheer absurdity; but still what we need is something wider and more vivid.

Similarly I would hint at affinities with the great saying of Protagoras, that Man is the Measure of all things. Fairly interpreted, this is the truest and most important thing that any thinker ever has propounded. It is only in travesties such as it suited Plato's dialectic purpose to circulate that it can be said to tend to scepticism; in reality it urges Science to discover how Man may measure, and by what devices make concordant his measures with those of his fellow-men. Now, measurement is that in which ancient science failed. Protagoras alone demanded it, and Humanism need not cast about for any sounder or more convenient starting-point.

For in every philosophy we must take some things for granted. Humanism, like Common Sense, of which it may fairly claim to be the philosophic working out, takes Man for granted as he stands, and the world of man's experience as it has come to seem to him. This is the only natural starting-point, from which we can proceed in every direction, and to which we must return, enriched and with enhanced powers over our experience, from all the journeyings of Science. Of course this frank, though not therefore "uncritical," acceptance of our immediate experience and experienced self will seem a great deal to be granted by those addicted to abstruser methods. They have dreamt for ages of *a priori* philosophies "without pre-suppositions or assumptions," whereby Being might be conjured out of Nothing and the sage might penetrate the secret of creative power. But no obscurity of verbiage has in the end succeeded in concealing the utter failure of such preposterous attempts. The *a priori* philosophies have all been found out.

And what is worse, have they not all been detected in doing what they pretended to disclaim? Do they not all take surreptitiously for granted the human nature they pride themselves on disavowing? Are they not trying to solve human problems with human faculties? It is true that in form they claim to transcend our nature, or to raise it to the superhuman.

But while they profess to exalt human nature, they are really mutilating it—all for the Kingdom of Abstraction's sake! For what are their professed starting-points,—Pure Being, the Idea, the Absolute, the Universal I,—but pitiable abstractions from experience, mutilated shreds of human nature, whose real value for the understanding of life is easily outweighed by the living experience of an honest man?

SCHILLER, FERDINAND C. S., *Humanism* (London, Macmillan, 1912), pp. xx-xxii.

95

Pragmatism and The Spirit of the Age

Pragmatism, both of the more moderate type, represented by James, and in the main by his American allies and followers, or the more radical type, represented by Bergson, Schiller, Papini, and LeRoy, is peculiarly significant of the present age. Negatively, it is significant of the reaction against absolutism, long enthroned in academic and other orthodox circles. It signifies that the spell which absolutism has long wrought upon the minds of inquiring and youthful thinkers has lost its power. More positively, pragmatism marks the maturing and the express formulation of certain ideas that have long inspired European thought.

In the first place, pragmatism employs for philosophic purposes what may be termed the "biological" imagination, as distinguished from the logical, the physical, and the introspectively psychological. Pragmatism views knowledge and religion as modes of life; and life it conceives not in any vague eulogistic sense, but in the naturalistic sense, as an affair of forced adaptation to an indifferent and, at best, reluctantly plastic environment. Knowledge and religion arise from the exigencies of life, and the exigencies of life are real, perilous, and doubtful.

In the second place, pragmatism emphasizes the crucial importance of human efforts. It teaches that the spiritual life is in the making at the point of contact between man and the balance of nature—between the ideals of man, and the resistances, cruelties, and seductions with which they are forced to cope. The hope of better things lies in the continued operation of the forces that are even now yielding good things. Civilization, not the totality of nature, nor any higher synthetic harmony, is the work of God. This is the Baconian prophecy renewed. Through the knowledge that is power, and guided by his desire and hope of better things, man may conquer nature and subdue the insurrection of evil.

Thirdly, since man's efficiency lies in his collective and not in his individual action, pragmatism emphasizes society. It is non-pantheistic and non-mystical. It attaches less significance to the direct relation between man and a dynastic God, and more to that relation to his fellows which may make a man a servant of the collective life, and so lead him to a new conception of God as leader of common cause.

And finally, pragmatism is melioristic. It speaks for the spirit of making better, and denounces alike the spirit of renunciation and the spirit of despair. It is the philosophy of impetuous youth, of protestantism, of democracy, of secular progress—that blend of naïveté, vigor, and adventurous courage which proposes to possess the future, despite the present and the past.

PERRY, RALPH BARTON, *Present Philosophical Tendencies* (New York, Longmans, 1929), pp. 267-268.

96

Knowledge and Philosophy as Contemplative and as Operative

The division of the world into two kinds of Being, one superior, accessible only to reason and ideal in nature, the other inferior, material, changeable, empirical, accessible to sense-observation, turns inevitably into the idea that knowledge is contemplative in nature. It assumes a contrast between theory and practice which was all to the disadvantage of the latter. But in the actual course of the development of science, a tremendous change has come about. When the practice of knowledge ceased to be dialectical and became experimental, knowing became preoccupied with changes, and the test of knowledge became the ability to bring about certain changes. Knowing, for the experimental sciences, means a certain kind of intelligently conducted doing; it ceases to be contemplative and becomes in a true sense practical. Now this implies that philosophy, unless it is to undergo a complete break with the authorized spirit of science, must also alter its nature. It must assume a practical nature; it must become operative and experimental. And we have pointed out what an enormous change this transformation of philosophy entails in the two conceptions which have played the greatest role in historic philosophizing—the conceptions of the "real" and "ideal" respectively. The former ceases to be something ready-made and final; it becomes that which has to be accepted as the material of change, as the obstructions and the means of certain specific desired changes. The ideal and rational also ceased to be a separate ready-made world incapable of being used as a lever to transform the actual empirical world, a mere asylum from empirical deficiencies. They represent intelligently thought out possibilities of the existent world which may be used as methods for making over and improving it.

Philosophically speaking, this is the great difference involved in the change from knowledge and philosophy as contemplative to operative. The change does not mean the lowering in dignity of philosophy from a lofty plane to one of gross utilitarianism. It signifies that the prime function of philosophy is that of rationalizing the possibilities of experience, especially collective human experience. The scope of this change may be realized by considering how far we are from accomplishing it. In spite of inventions which enable men to use the energies of nature for their purposes, we are still far from habitually treating knowledge as the method of active control of nature and of experience. We tend to think of it after the model of a spectator viewing a finished picture rather than after that of the artist producing the painting. Thus there arise all the questions of epistemology with which the technical student of philosophy is so familiar, and which have made modern philosophy in especial so remote from the understanding of the everyday person and from the results and processes of science. For these questions all spring from the assumption of a merely beholding mind on one side and a foreign and remote object to be viewed and noted on the other. They ask how a mind and world, subject and object, so separate and independent can by any possibility come into such relationship to each other as to make true knowledge possible. If knowing were habitually conceived of as active and operative, after the analogy of experiment guided by hypothesis, or of invention guided by the imagination of some possibility, it is not too much to say that the first effect would be to emancipate philosophy from all the epistemological puzzles which now perplex it. For these all arise from a conception of the relation of mind and world, subject and object, in knowing, which assumes that to know is to seize upon what is already in existence.

DEWEY, JOHN, *Reconstruction in Philosophy* (New York, Holt, 1920), pp. 121-123.

97

The Method of Pragmatism

Don't seek to solve a question, says pragmatism, until you know what you mean by it. Think so far as possible in concrete terms. Never let yourself be hoodwinked and browbeaten by big words and verbal abstractions. Remember that the meaning of philosophical terms may often be in inverse proportion to their length. Words are but pragmatists' counters; they do but reckon with them; but they are the money of non-pragmatists. Concerning every object of discussion ask the question: What is it known as? What does it mean to me? For, as G. H. Lewes has said, and as Aristotle said long before him, a thing is what it does. All that it can ever mean is just the difference that it can make to some one. There is no genuine difference that does not make a difference.

Well, every pragmatist will tell you this is pragmatism; and I trust all my hearers are good pragmatists. It goes without saying that I am one. Who, indeed, could resist a doctrine so delightfully healthy, clear-cut, simple and helpful? It has the salt air of the sea in it and the ozone of the mountains. With this philosophy within one's grasp, who would choose to be bound down in servile submission to verbal abstractions, and to spend one's days discussing problems that have no meaning? Rather let us think clearly and to the point, and sign an intellectual Declaration of Independence from all unmeaning concepts. It is not surprising that the new philosophy is advancing victoriously over the land, and that all sorts and conditions of men are joining the procession.

Pragmatism seeks and claims to be strenuous, militant,—a plan of campaign rather than a celebration of an experience meeting. So much of pragmatism as I have described thus far is only its spirit; but it is in addition to this a definite and technical doctrine or group of doctrines or certain fundamental philosophical questions. Pragmatism (according to Mr. James) "is a temper of mind, an attitude; it is also a theory of the nature of ideas and truth, and finally it is a theory about reality." More specifically, it may be said that pragmatism offers us a theory of meaning, a theory of truth, and a theory of knowledge; that it is trying to work out a theory of reality; and that it is also a general point of view or way of looking at things,—a way that is in part peculiar to pragmatists, in part adopted by them from a larger tendency or attitude which colors much of contemporary thought.

Pragmatism may be regarded as the result of two confluent, though not altogether consistent, streams of tendency. The first, and probably the less influential, of these may be traced back as far as Kant's doctrine of the primacy of the practical reason. We cannot, said Kant, prove the reality of God, freedom, immortality, and the moral law. But since we are volitional, active, rational beings, we have both the right and the duty to postulate the reality of these things and whatever else may be essential to moral action. It is indeed possible that we are not free; but we are bound to act as if we were free, and since freedom is essential to morality, it is our duty to believe in it.

Practically this same brave moral doctrine was revived and reformulated in 1896 by Professor James's "Will to Believe," a book that has stirred America as have few philosophic works of our generation. In the first essay of the volume (which gave its title to the whole) Professor James points out that faith is itself a force and often makes real its own object; and that when we are faced with genuinely possible alternatives we have a right to accept and believe that one whose acceptance will contribute most to our moral life. Here and elsewhere, moreover, James shows that in morality and metaphysics and religion, as well as in science, we are justified in testing the truth of a belief by its usefulness.

The second and probably the more important source of pragmatism is the modern scientific view of the meaning of hypotheses. Hypotheses, "natural laws," scientific generalizations, etc., are, as most scientists now maintain, merely shorthand expressions of human experience. They are handy ways of telling us what has happened or what we may expect. They are not so much description of an outer and independent "nature" as ways of summarizing and explaining our experience. Their whole meaning is exhausted after they have told us (directly or indirectly) how things act upon us and how we react upon things. That I may be sure not to misrepresent the modern logic of science as pragmatism understands it, let me make use of a sentence from Ostwald, quoted with approval by Professor James in his recent book:

"All realities influence our practice, and that influence is their meaning for us. I am accustomed to put questions to my classes in this way: In what respects would the world be different if this alternative or that were true? If I can find nothing that would become different, then the alternative has no sense."

The scientist, in short, sees that his hypotheses and laws ultimately get all their meaning from our experience. And, moreover, he no longer regards them purely as ends in themselves; rather are they now his instruments by the use of which human action may profitably be guided. Hence he is less concerned than were his predecessors with the question whether his hypotheses are true; what concerns him most is their usefulness. His great question concerning any proposed generalization is, Does it work? And this for two reasons: in the first place, because its working is practically more important to him than its merely theoretical truth; and secondly, because the only test he has for its truth is its successful working. Unless it works, he has no reason to believe it is true. Moreover, as truth and usefulness are both forms of value, the scientist who has no time nor fondness for what he calls "Logic chopping" has a tendency to identify the two, without asking himself too curiously whether his hypothesis is true because it is useful or useful because it is true.

PRATT, JAMES B., *What is Pragmatism?* (New York, Macmillan, 1909), pp. 6-15.

98

Pragmatism in Relation to Culture

The aspect of Pragmatism which has exerted most influence on Education is the subordination of thinking to practice. In the pragmatic conception, we are told, knowing is the prelude to doing, thought is secondary to action. Cognition in itself is incomplete until discharged in act. . . .

If culture is to be saved, it must be by developing in pupils a love of knowledge for its own sake; the pragmatist is right in maintaining that practical activities must provide the incentives to learning, but the end must be development of a disinterested activity. It may be that America, owing to its dependence on a pragmatic philosophy, is paying the penalty for its failure to recognize this fact in the generally admitted unsatisfactory state of its secondary education.

RUSK, ROBERT R., *Philosophical Bases of Education* (Boston, Houghton Mifflin, 1929), pp. 80, 93.

99

The Pragmatic Method

The theory of the method of knowing which is advanced in these pages may be termed pragmatic. Its essential feature is to maintain the continuity of knowing with an activity which purposely modifies the environment. It holds that knowledge in its strict sense of something possessed consists of our intellectual resources—of all the habits that render our action intelligent. Only that which has been organized into our disposition so as to enable us to adapt the environment to our needs and to adapt our aims and desires to the situation in which we live is really knowledge.

Dewey, John, *Democracy and Education* (New York, Macmillan, 1916), p. 400.

100

The Ethics of Pragmatism

It is hard to see how a philosophy of ethical education can dispense with the idea of our connection with one another in some such ties of absolute obligation. But Pragmatism will have nothing to do with a perfect order of being and with the unconditioned obligations of this spiritual kinship. Its interest is less ethical in the strict sense than social psychologic. A social philosophy is more occupied with the fact that people live together and with methods of bringing them to more harmonious life than in seeking out the highest of patterns, the best ways in which people ought to live together. It is apt to fix its eye more upon the fact of togetherness than upon the ultimate goals which social beings must seek in order to become ethical beings. Note in the following passages how interest is centered on the perception of mere interrelation: "Travel, economic tendencies, have at present gone far . . . to bring peoples and classes into closer and more perceptible connection with one another. It remains for the most part to secure the intellectual and emotional significance of this physical annihilation of space." The ideal society is declared to be one "in which every person shall be occupied in something which makes the lives of others better worth living, and which accordingly makes the ties which bind closely together more perceptible, which breaks down the barriers of distance between them." An essentially ethical aim, however, would insist, not only on the perception of the ties which do indeed bind persons, but especially upon the ties which ought to bind them. It would want the ties to be, not merely more perceptible, but full of nobler understanding, bonds in which each recognizes his kinship with all others in a society of beings at their ideal best. Moral growth is a matter of deepened insight into the reality and the nature of such perfect associations.

Neumann, Henry, *Education for Moral Growth* (New York, Appleton, 1924), pp. 172-173.

101

The Main Principle of Pragmatism

The main principle of pragmatism is, the theories that work are true. This is very different from saying, true theories work. In the former case, practicality constitutes the very nature of truth; in the latter case it is only one of the tests of truth. All are willing to admit that true theories work sooner or later, but not all are willing to admit that any working theory today is true. The latter view makes truth changeable, makes it grow, makes the truths of today the falsehoods of tomorrow, which is the pragmatic view, while most people, admitting our views of truth may change, would hold that truth itself is eternal, changeless, subject to no identification, after any lapse of time whatsoever, with falsehood. Let the reader compare these utterances: "Truth is made, just as health, wealth, and strength are made, in the course of experience" (James); and, "All errors have only a time. After a hundred millions of subtleties, sophisms, and lies, the smallest truth remains precisely what it was before" (Chinese). Our feelings may or may not prefer the former; our reason inclines to the latter.

Horne, Herman Harrell, *Free Will and Human Responsibility* (New York, Macmillan, 1912), pp. 155-156.

102

The Logical Outcome of Pragmatism

The logical outcome of Pragmatism is that the good is what pays; the logical outcome of Humanism, with its evolutionary Ethics, is that the good is the pleasant or the desirable or the beneficial.

With all their air of brand-new modernity, neither Pragmatism nor Humanism have added anything to the Utilitarianism of the middle nineteenth century, nor to the Hedonism of the year 400 B. C. Pragmatism wears a Quaker's hat, and Humanism has vine-leaves in its hair. Their quest is not for Ultimate Reality, but for steam engines and motor cars, and synthetic chemistry; or for Tango, if that is pleasant, desirable, and beneficial.

Sinclair, May, *A Defence of Idealism* (New York, Macmillan, 1917), p. 150.

103

Pragmatism Inadequate

The biological type is to-day the most popular of all forms of pragmatism in philosophical circles. Yet it is inadequate. A philosophical criterion of truth must not be narrow in its range or limited to one class of truth only. It must be inclusive of all types of experience, all objects of knowledge and belief. To pick out one of the special sciences as the source of the criterion of all truth is arbitrary procedure. If at one time biology is the fashionable science, at another it is physics, or mathematics, or psychology; but philosophy ought to be superior to the whims of fashion, and should allow no special science to usurp her rightful seat. Biology, as a special science, leaves many important facts out of account. It makes no attempt to prove or disprove the law of falling bodies, or the Pythagorean theorem, or the principles of democracy. A pragmatist like Moore, . . . aware of the limitations of biology as ordinarily understood, tells us that the appeal is to "a transfigured and glorified biology, loaded with all the conscious and social values which are denied it by those who find it such a bugbear." One might wonder whether biologists would recognize their child! If biology is equivalent to the study of all experience and all values, it doubtless contains, hidden somewhere, the criterion of truth. But is it not time to call a halt on the unlimited pretensions, not of the sciences, but of some men of science? There is a tendency on the part of sociologists to make sociology cover everything;

the moralist makes ethics everything; the psychologist makes psychology everything,—and this is true of each subdivision of psychology,—normal, abnormal, social, and so on. The pretentious claims made for each special point of view lack the justification of the "strife of systems" in philosophy; for the former are based on a narrow outlook; while the latter arises from the difficulties of an inclusive or synoptic standpoint. A biological pragmatism, then, is to be condemned for its narrowness; either it leaves out of account the points of view of other sciences, of universals, of values and ideals or else it approaches them from its single and restricted standpoint, which precludes a complete and adequate interpretation of their nature. The German Vaihinger, who makes much of the biological functions of ideas, is more logical than the Anglo-American pragmatists. He points out the biological significance of our fundamental ideas, but is bold enough to assert that their biological utility is no proof of their truth; we must act and think, he holds, "as if" these ideas were true, knowing all the while that they are only "fictions." Thus biological pragmatism issues in skepticism and destroys itself as criterion of truth.

Pragmatism remains a very significant movement, and one worthy of thorough investigation; but it is neither clear nor self-consistent nor inclusive. It calls attention to important aspects of experience that should not be ignored, and thus contributes to philosophy; but it neglects important aspects and thus refutes itself.

BRIGHTMAN, EDGAR SHEFFIELD, *An Introduction to Philosophy* (New York, Holt, 1925), pp. 57-58.

104

Is Pragmatism True?

What we want to know about pragmatism is, is it true? There are two views of the meaning of truth. One is the pragmatic view that the ideas which on the whole and in the long run solve our problems best are true. They are not true because they represent reality correctly but they are true because they control reality successfully. Ideas are true because they work. It is the successful working of an idea that constitutes its truth. The other view is that true ideas represent the situation correctly. The proposition, the sun shines, is true because the sun does shine. A true proposition states what is so. It is only a question of fact. There is no question of making the sun shine, or controlling the shining of the sun, but only of the fact whether the sun shines. Truth is the agreement of statement with fact. Ideas are not true because they work; they work, if they work at all, because they are true. This view is held by realists and idealists alike. Realists and idealists differ, not in theory of truth, but in their theory of reality.

How shall we decide between these two views of truth? It is partly a philosopher's logomachy. The pragmatists call truth what the non-pragmatists call the effect of truth. The non-pragmatists call truth what the pragmatist denies can ever take place, holding that no static proposition can ever correctly represent a fluid fact. "The sun shines" means the sun emitted light beams eight minutes ago. But, say the non-pragmatists, some facts are not fluid, and so on, back and forth.

We might begin by applying pragmatism to pragmatism. Does it work? The answer is, to some it does and to some it does not. Pragmatism works with the pragmatists and does not work with the non-pragmatists. Thus, pragmatism lacks a workable criterion of truth, landing us hopelessly in individualism, re-instating the position of Protagoras that man is the measure of all things. A successful working of the pragmatic theory of truth would include the general recognition and acceptance of it. This is lacking. The theory falls by its own standard. Or, maybe it has not had time yet to win its way.

But possibly pragmatism is the view that men ought to accept, whether they do or not? Why? Because it is the true view. But this sets up the non-pragmatic standard of truth. It could be the true view which men ought to accept, whether they do or not, only because it correctly states the case. And this is the non-pragmatic standard. There is no ought in the pragmatic theory of truth, requiring men to accept it. There is an intellectual obligation to know and accept the truth in the non-pragmatic theory.

Strictly interpreted, the pragmatic theory means the pursuit, but not the possession, of truth. The situation changing constantly, the ideas controlling it must change constantly, and so the truth is no sooner determined than it is dissolved again. "One never descends twice into the same river," said Heracleitus. Dr. Dewey admits this; knowledge ceases to be knowledge unless it is being used ever afresh in solving new problems.

A bit of the dialectic so offensive to the pragmatist. Dialectic insists on consistency in thinking. The pragmatic theory that truth is constantly changing is itself held to be a truth that does not change. The theory is self-contradictory. The truth that does not change is so because it correctly represents a situation, even a changing situation.

But there are cases in which two different sets of ideas will work equally well, in which it makes no difference to the outcome which set of ideas is held. A clever thief substitutes a copy for an original painting of an old master. The owner never knows the difference and goes on believing he owns an original. Is his belief true? Or, if the substitution is later detected, was his belief true while it lasted? and became false after the detection? His satisfaction was the same with the substitute as with the original until the discovery. A bank employee misappropriates funds, using them in profitable stock speculation; he replaces the funds taken; assume he does not risk it again; his act is undetected; the bank officials go on believing his honesty never lapsed. Is their belief true? Suppose the "perfect crime" were committed. There is no clue. Many different persons may each be guilty. One of them, A, is. But there is no evidence. No one theory works better than any other. Is the theory that A did it true or false? Most persons would probably say the theory that A did it is true, though it could not be known to be true. Here the appeal is not to workability of the idea but to its agreement with fact. Consider the case of the "useful fiction" described by Plato, that the earth is the common mother of all and that all are brothers, which future generations might believe. Suppose this "royal lie" worked increasingly well in the state. Would that make it the truth?

Many other illustrations could be given of the difficulty in accepting the pragmatic theory of truth. Turning to education, we may allow the acquisition of knowledge in schools by means of activities carried on in a social medium without excluding other methods of knowing. If knowing is agreement with reality as well as controlling situations, and if there are legitimate satisfactions in such knowing, then our schools may continue to stress knowledge for its own sake and non-occupational modes of acquiring it. It is a good thing for our pupils to know what has worked, what is so, as well as what may be tried. Our viewpoint does not exclude from the schools the pragmatic method of trying and seeing but supplements it with the tried and true.

In sum, we question the democratic origin of pragmatism, its adequacy as an epistemology, and its exclusive adoption by our schools.

Horne, Herman Harrell, *The Democratic Philosophy of Education* (New York, Macmillan, 1932), pp. 500-503.

CHAPTER V

Idealism in Education

THE material in this chapter deals with idealism as a philosophy of education. First we have a statement of what idealism is (105). Next there is a quotation which sets forth the difference between materialism, a form of naturalism, and idealism (106). Then follow readings which present the claims of idealism as a philosophical basis of education (107, 108). Selection 109 considers idealism in relation to values. Throughout the chapter the student will find evidence supporting the idealistic point of view. In relation to education special attention is called to selections 118 and 121, and in relation to philosophy and science, to selections 120 and 122.

105

What Idealism Is

Idealism is the philosophy which holds that reality is of the nature of mind.

The idealist's position may be expressed in two propositions, one negative and one positive:

(a) The apparent self-sufficiency of nature is illusory: nature appears to be independent, to go its own course, to operate its own laws, to be eternal, to require no creator or other ground outside of itself; but in truth, nature does depend on something else. (Note that idealism does not say that "nature is illusory," as it is sometimes supposed to say.)

(b) That upon which nature depends is Mind (Spirit, Idea). The word, idealism, is not particularly fortunate to express what this positive proposition means. In the first place it ought not to suggest ideals (as though it had any monopoly of ideals) but ideas, the "l" having entered the word for euphony rather than for sense: idea-ism would be more to the point. In the second place, the stem "idea" is an historical accident, due to the fact that John Locke and his idealistic successor, Berkeley, regarded experience as made up of ideas, which are, at best, fragments of mentality. Mentalism or spiritualism would be more accurate names, but they have been drafted to other uses. We shall therefore adhere to the word, idealism, taking it to signify simply that whatever is ultimately real in the universe is such stuff as ideas are made of rather than such stuff as stones and metals are made of. That is, if we are looking for the substance of things, the ultimate being which explains all other beings, we shall find it to be mental in nature,—the thinker and his thought, the will and its doings, the self and its self-expression. And whatever appears to be other than this, independent of it or hostile to it, as matter, or force or space and time, will be found to depend on the mind for its very existence.

HOCKING, WILLIAM E., *Types of Philosophy* (New York, Scribner, 1929), pp. 247-249.

106

Materialism and Idealism

Just as Materialism considers the Universe as grounded and rooted in matter; or in physical energy, so Idealism considers it as grounded in mind. In interpreting the world, Materialism puts the emphasis upon mechanical and efficient causes, upon the conservation of energy, upon the movements of mass particles in space. It makes mind an incident in the process of evolution, contingent upon a highly developed nervous system in the higher animals. Idealism, on the other hand, puts the emphasis upon mind, as in some way prior to matter. It says, in effect, if you seek for elemental things, you will not find them in matter and motion and force, but in experience, in thought, in reason, in intelligence, in personality, in values, in religious and ethical ideals. These are the world's realities and they have a cosmical rather than a mere human significance, while matter, physical bodies, and physical forces are in some way secondary, being perhaps a kind of externalization of mind or else a phenomenon or appearance of mind. Materialism says that matter is real and mind an incident or accompaniment. Idealism says that mind is real and matter just an appearance. . . .

Certainly the Idealists all have much in common. They refuse to believe that the world is a great machine. They deny the supreme importance of matter, mechanism, and the conservation of energy, as explaining our world. They feel that somehow certain sciences, such as psychology, logic, ethics, aesthetics, have to do with things basal and intrinsic, that they are quite as much a key to nature's secrets as are physics and chemistry. They believe that the world has a meaning, a purpose, perhaps a goal, and that there is a kind of inner harmony between the heart of the Universe and the soul of man, such that human intelligence can pierce through the outer crust of nature and penetrate to its inner being, at least in some slight measure.

Patrick, George T. W., *Introduction to Philosophy* (Boston, Houghton Mifflin, 1924), pp. 238, 251.

107

The Only Satisfactory Basis of Education

Idealism contends that the material and physical universe known to science is an incomplete expression of reality, that it exists but to subserve, and requires to complement it, a higher type of reality, a spiritual universe. Idealism also emphasizes the distinctiveness of man's nature. It attributes to him the possession of powers which issue in the form of intellectual culture, art, morality and religion. These powers and their products are peculiar to man, and differentiate him from other animals; they lie beyond the range of the positive sciences—biological and even psychological; they raise problems which only philosophy can hope to solve, and make the only satisfactory basis of Education a philosophical one.

RUSK, ROBERT R., *Philosophical Bases of Education* (Boston, Houghton Mifflin, 1929), pp. 94-95.

108

Education from the Point of View of Idealism

Idealism regards education as a means, not as an end in itself. Education is a tool, an instrument, first in the hands of parents or society in realizing their ideals for their young; in the hands of the state for the making of a certain type of citizen; in the hands of the church for producing a certain type of character. The kind of education secured varies in value with the ideals of the agency using it. Even in the philosophy under consideration education is used to bring more democracy into society. The end of ends, the goal of goals, according to idealism, is the increasing realization of the Absolute Idea for the individual, society and the race. It includes the conception of an ideal social order, which may very well be a social democracy. But it includes something for the future of the individual himself and for the future individual as well as the proper relations between individuals at any given time. It includes eugenics for the future individual and an unending life for all individuals. This is an absolute goal but it is no more alien or foreign to the educative process than is the conception of an as yet unrealized social democracy.

Pragmatism is the child of idealism. Behaviorism is the child of materialism. Pragmatism and behaviorism combined give us an educational philosophy that is practical, functional, near-to-earth, human, social. It is an educational philosophy that is improving schoolroom practice, making learning a more purposeful process, giving children the sense of reality in the school, making schools into workshops, laboratories, and libraries, and inspiring educational experimentation. For all this, as far as it goes, and it goes far, idealism has only approbation, and the approbation is great.

But in addition an idealistic philosophy of education touches earth with heaven, sees men as children of the Infinite, is non-practical as well as practical, believes in knowledge for the sake of knowledge as well as for the sake of life, acknowledges an absolute goal for life and education in pursuit of which man finds himself most truly, accepts the divine origin and immortal destiny of man, and finds living glorious because "heaven lies about us" in both our infancy and our maturity. Thus the night of obscurity concerning whence we come and whither we go that enshrouds the one philosophy is illuminated with the stars of faith and the hope of the other that shine for us "'til the morning comes and the shadows flee away." Thus man's education is his conscious progress toward the Infinite.

HORNE, HERMAN HARRELL, *The Philosophy of Education* (London, Macmillan, 1930), pp. 301, 316.

109

Idealism and Values

The idealist regards the state as society organized for conservation and creation of moral values. The idealist's state differs from the materialist's state in the conception of society and the nature of values. The idealist regards man as a rational and moral being capable of progressively realizing in human society a system of absolute ideals and values. The materialist tries to build his state out of the natural instincts and impulses only, and hence must regard all truth and values as merely relative to immediate human interests, all social organization as a temporal and changing union of convenience. Recognizing the relative place of natural forces, the idealist regards persons as primarily spiritual units in a society governed more and more in harmony with unchanging moral laws. Conceding to the naturalist that "the state begins with the bare ends of existence," in the words of Aristotle, the idealist believes that the state "persists for the sake of the good life, for the pursuit of perfection, for noble actions, not mere companionship." Political society is regarded as providing the material conditions, the technique, forms, and relationships necessary for the attainment of individual and social perfection. The state is the union of the rational wills of numerous men in the cooperative effort to realize the highest ethical good of all.

The materialist organizes his system on the basis of natural law, and endeavors to explain all political relations as mathematical corollaries of physical processes. The rationalist, on the other hand, is interested in the logical arrangement of ideas, and his state must be built in harmony with a total coherently integrated system of ideas known as the Absolute. As the naturalist describes his state by the analogy of the body, so the rationalist describes his state according to the analogy of the mind of man. The personal idealist believes that not only economic and intellectual goods but all of the values of life should be included in this organic system.

As the individual grows in character, so the state also progresses toward perfection. The state does this by the conscious effort on the part of its leaders to increase the individual powers and harmonious cooperation of its members. The purpose of the state is to help souls grow. As souls are to be perfect, even as the Father in heaven is perfect, so also the state as a community of souls approaches the perfection of the Kingdom of God as its goal. Political progress is measured by the extent to which the ideals of this Kingdom are realized on earth.

ATHEARN, CLARENCE, *Interchurch Government* (New York, Century, 1925), pp. 274-277.

110

Scientists Do Not Search for Ultimate Truth

One must, of course, discriminate, and must account as masters only those who speak with the authority of authentic achievement. If one has some substantial preliminary training, one may read with profit the few serious scientific and philosophic books produced each year; and may at least feel oneself to have been at the front. It is notable that these scientists of the first rank have given over the search for Ultimate Truth. They are no longer sure that they can explain the Universe; on the contrary they are now quite sure that they cannot explain it, but can only describe it. They have become mystics, realizing that they stand face to face with a Greater Power whose magic operations they may study and investigate with immense delight and profit, but whose ultimate nature and purpose they are quite unable to fathom. This wholesome confession of limitation does not imply any hopelessness. Within the spacious boundaries of the knowable, so much of intrinsic interest and practical usefulness still remains to be found out that research goes forward with leaps and bounds; the scientist need never weep with Alexander that there are no more worlds to conquer. Each significant bit of research work brings in its train a dozen or more challenges to additional research. We no longer meet with final statements in any department of science. We reach mile-posts, but no terminals.

HENDERSON, CHARLES H., *The Charioteer* (Boston, Houghton Mifflin, 1933), pp. 6-7.

111

Man Alone Perpetuates Himself

That which will ever distinguish man from the rest of creation is his power of deliberate affection and of enduring self-sacrifice. The mother who took care of her brood in the corner of my window devoted to them the necessary time for accomplishing the laws which insure the preservation of her kind, but she obeyed an instinct and not a rational choice. When she had accomplished the mission appointed her by Providence she cast off the duty as we get rid of a burden, and she returned again to her selfish liberty. The other mother, on the contrary, will go on with her task as long as God shall leave her here below: the life of her son will still remain, so to speak, joined to her own; and when she disappears from the earth she will leave there that part of herself.

Thus the affections make for our species an existence separate from all the rest of creation. Thanks to them, we enjoy a sort of terrestrial immortality; and if other beings succeed one another, man alone perpetuates himself.

SOUVESTRE, EMILE, *An Attic Philosopher in Paris* (New York, Burt, no date), p. 108.

112

Power of Ideals

By eliminating the things we care least for, and by substituting others that we do care for, we build, bit by bit, our beautiful ideals,—the soul-images that so potentially influence our lives. How full of feeling is this activity! How we revel in it because we are free from all limitations! Our minds are like the river that "glideth at his own sweet will." Thus we make the picture life of thought which at last we carve into a life of deeds. Without ideals there could be no progress,—only endless and changeless, dreary and hopeless monotony. Without ideals our minds would become like the wayside pool,—stagnant and deadly. With ideals they become like mountain rills that leap from moss-rimmed rocks in endless showers of silver spray, clothed in rainbows, and bearing in their sweep life and beauty and grandeur. Happy the child whose unfettered spirit may build after its own plans the terraced slopes, the sun-crowned spires, the carved pillars, and the golden portals of the temple of truth. Into it his spirit may pass to find the sweetest communions, and to gather inspiration for the highest achievements. It is the soul's most holy place. Here the divinity that is in us is enshrined. Here we may worship and adore. The soul is most joyous when most free. The desire to build ideals is innate. We long to become what our ideals figure. The struggle is always from the thing we are to the thing we wish to be. Lowell well portrays this in his poem entitled "Longing":

Of all the myriad moods of mind
  That through the soul come thronging,
Which one was e'er so dear, so kind,
  So beautiful as Longing?

The thing we long for, that we are
  For one transcendent moment,
Before the Present poor and bare
  Can make its sneering comment.

Still, through our paltry stir and strife,
  Glows down the wished Ideal,
And Longing moulds in clay what Life
  Carves in the marble Real;
To let the new life in, we know,
  Desire must ope the portal;—
Perhaps the longing to be so
  Helps make the soul immortal.

Longing is God's fresh heavenward will
  With our poor earthward striving;
We quench it that we may be still
  Content with merely living;
But, would we learn that heart's full scope
  Which we are hourly wronging,
Our lives must climb from hope to hope
  And realize our longing.

Ah! let us hope that to our praise
  Good God not only reckons
The moments when we tread his ways,
  But when the spirit beckons,—
That some slight good is also wrought
  Beyond self-satisfaction,
When we are simply good in thought,
  Howe'er we fail in action."

Brumbaugh, Martin G., *The Making of a Teacher* (Philadelphia, Sunday School Times Company, 1905), pp. 70-72; (New Edition, New York, Harper, 1932).

113

The Potency of Ideas and Ideals

Without using the term ideas in the Platonic sense, as the archetypes of created things, we may still say that fruitful ideas are immortal; that while the particular forms in which they have been embodied may disappear, the content persists, and will reappear in other forms, and thus maintain a continuity of existence. Ideas, such as I have in mind, not only have an inherent vitality, but also a native energy, whereby they are ever striving to embody themselves in act. The artist must embody his ideals on canvas or in marble; the inventor his in a machine; the political philosopher his in a model republic; and so on to the artisan, who fashions his work according to some pre-existing idea.

Our lives are unconsciously moulded by our ideas and our ideals. We are ever tending to grow into certain forms that have been impressed on our minds as ideas. We spend our lives in constructing, and we construct according to models and patterns. When we construct ill, the fault is oftener in our models than in our fingers. The cook who would serve us a toothsome roast must, first of all, have what Plato would call the idea of a roast; and not only this, but, once having a clear idea of a roast, the novice will be able, on occasion, to make his hands execute what his head prescribes. Whether we are to paint a picture, build a house, teach a school, or bake a biscuit, the first condition of success is a clear idea of the thing we wish to do; and the other half of this truth is that, once having such ideas, we are under a virtual compulsion to embody them in act. The acquiring of manual dexterity is a secondary consideration, and, in the learning of an art, is wholly subordinate to the formation of a model as a mental image.

The view opposed to this is the stronghold of empiricism. "We must learn to swim by swimming," say the practical philosophers whose voices are now loudest in the land. "We must learn grammar by using language," is another form of this popular doctrine. The mischief done by such dogmatists lies in the fact that these dicta embody one phase of a truth while concealing a complementary phase. We have the authority of a noted clergyman for saying that "a half truth is a whole lie." While, in all constructive efforts, a definite idea of what is to be done is the first condition of success, a second and secondary condition is the empirical effort. My ground of dissent from the "practical" view is, that this empirical effort is put forward as the prime and sufficient condition of success in construction. One might, if he were stupid or obstinate, learn the route to London by going there; but the prudent traveller would form a mental trace of the route in advance as the only means of co-ordinating and economizing his efforts. I believe the first condition of success in the work of education is the formation of distinct and adequate ideas of what it is to educate, what it is to teach, what a school should do, what it is to organize and to govern, etc. One's own experience as a pupil, and the observation of excellent educational work, will furnish the teacher with valuable ideas; but, as all human models are imperfect, there must be formed in the mind of the teacher an ideal type of excellence far superior to anything that offers itself to the observation, and even far beyond anything that is actually attainable in practice. The ideal is always unattainable, but it is approachable; and no work above mediocrity is possible save on the condition of striving towards an ideal.

Payne, William H., *Contributions to the Science of Education* (New York, American Book Company, 1886), pp. 157-159.

114

Scientific Method and Emergent Evolution

A conflict has seemed to rage between the principles of scientific method and the principles by which human beings act. Since mechanical science asserts that all action is determined by the physico-chemical conditions preceding it, in such a way that all action could be predicted from a knowledge of those conditions, it leads to fatalism, to the extinction of all stimulus to effort; of all man's attempts to guide the course of events. Ideas, ideals, purposes, beliefs—all that is mental—are left without functions in the scheme of things. They ought not to exist; their existence is unaccountable.

Holding further that the future could be computed from the past, and that the laws of nature are immutable, mechanical science turns exclusively to the past for judging of the future. Nothing will be exemplified in the future that has not in principle appeared in the past. For man's affairs as for all others, the thing that hath been is the thing that shall be, and there is no new thing under the sun. The idea of altering humanity, of replacing what has been bad by what will be better, is a romantic fancy.

This doctrine is often applied specifically, with startling results. Warfare and destruction have been in the past the means of advance, through natural selection. The laws of nature are immutable; this then must continue. Rapine and murder are the means of progress. To try to stop them is to try to change the laws of nature. Gentleness, pity, humility, and the rest of the "slave virtues" are weaknesses deserving of destruction and certain to get their deserts. The only justifiable conduct is that whose powerful violence leads to triumph in the struggle for existence. Ethics does not exist in the universe of perfect evolutionary mechanism; from the latter we learn the opposite of everything by which we aspire to guide our daily lives and to organize society. Such aspirations are sickly longings to oppose the course of nature, and they are quite without influence on the course of events.

With the acceptance of the doctrine of emergent evolution, all this changes. Aspirations do influence the course of events. Thoughts, ideals, purposes, are among the determining factors for the happenings in nature. It is not strictly true that "popular approval or disapproval will not alter the course of nature," if man is a part of nature. The desires and aspirations of humanity are determiners in the operation of the universe on the same footing with physical determiners. What is to come in the future is not predictable from what has occurred in the past. The laws of nature are not immutable, in the sense that new laws shall not be exemplified as new conditions arise. Because things have occurred in a certain way in the past, it does not follow that they must thus occur in the future. This has not been the history of evolution in the past; there is no ground to expect it in the future. Scientific method is reconciled with humanism. There is nothing in legitimate science or scientific method that makes it unreasonable to hope for the appearance in the future of what has not been seen in the past. Nothing in science is incompatible with striving to realize ideals that have never yet been realized.

JENNINGS, HERBERT S., *The Biological Basis of Human Nature* (New York, Norton, 1930), pp. 375-376.

115

Ideas and Purposes the Realities of Existence

Idealism finds ideas and purposes to be the realities of existence; and personality, which is the union of ideas and purposes, to be the ultimate reality. These views are in contrast with all forms of materialism which would reduce ideas and purposes to some form of physical existence.

Educating is the purposeful providing of an environment; at bottom it is personality in and behind the environment that counts most; so educating is really a relation between personalities of different degrees of maturity.

If these views are correct, it is evident that idealism is the true philosophy in educating. The relation between teachers and pupils, being personal and reciprocal, is something more than materialism can either allow or explain, than the commercialism of trade can understand, than any form of egoism can attain.

HORNE, HERMAN HARRELL, *Idealism in Education* (New York, Macmillan, 1923), p. vii.

116

Practical Results of Idealism

Men always seek what they think is the most worth while. And whenever men have dwelt amid lofty idealisms it has somehow always resulted in better transportation and wages, because it has taught them how to act more efficiently together for higher values than merely securing more butter on their bread. But you are in danger of passing through a most notable, if not a great age, with nothing to show for it except more butter on people's bread. Indeed, whether it turns out to have been a great age of butter or a great age of life depends largely upon whether religion, art, ethics and philosophy can give men, through your wiser social and political organizations, more bountiful inner values of beauty, gentility, and interest for which to live.

WIGGAM, ALBERT EDWARD, *The New Decalogue of Science* (Indianapolis, Bobbs-Merrill, 1923), p. 238.

117

Idealism Recognizes All Aspects of Life

If then we divide the human environment into natural or material, and psycho-social or cultural, and the former again into the physical and technical, the latter into intellectual, aesthetic, ethical and religious, we must conclude that any system of education which claims to be comprehensive must prepare the child to appreciate all these aspects, and that a system of education which ignores any one is necessarily incomplete. The idealist in Education, believing that the intangible values are the ultimate and eternal realities, will also emphasize the spiritual aspects of experience, insisting that knowledge, art, morality and religion are the aspects of life of supreme moment.

RUSK, ROBERT R., *Philosophical Bases of Education* (Boston, Houghton Mifflin, 1929), p. 109.

118

Idealism in Educating

Not every man, not every teacher, can idealize his work ethically, or at all. It is our great desideratum. It is by the use of idealism we are to make men and women who can idealize. With the perfecting of the spiritual sense along with the other noble physical, intellectual, emotional, moral, and social capacities of man, we may anticipate the day when the measure of a man will include the physique of the athlete, the reason of the scientist and philosopher, the feeling of the poet, the imagination of the prophet and inventor, and the will of the reformer. Such men will be practical idealists, with vision to see and with energy to execute. Some such fruition as this has already been glimpsed in the greatest characters of human history; those great ones are the earnest of the coming men and women God is making through present men and women. To aid in this work is the true calling of all noble souls. And to aim at this fruition, the perfecting of humanity in the image of divinity, is *idealism in educating.*

Horne, Herman Harrell, *Idealism in Education* (New York, Macmillan, 1923), pp. 176-177.

119

Rule of the Natural Order and Rule by Ends

It is only on one side of his make-up that man comes under the rule of the natural order. Although his misdeeds can be traced back to his physical constitution, the nerves which he has inherited, his schooling, and other influences in his environment, this application of the law which holds for natural objects does not explain him as fully as it can explain the happenings in things. He is capable of responding to a law of wholly different kind, the law, namely, of being governed, not by what has gone before, but by what he knows ought to be. A man can frame an image of what he never was but knows he should become, and, under the prompting of that ideal, he can hold himself to account for better conduct than he has yet displayed. He is capable of being ruled, not only by causes, but by ends, and by ends that are better than the projection of such desires as he shares with the animal world. Whether, in particular instances, he will respond to the call of such ends, he can tell only after he has tried. The way to prove the capacity for such freedom is to try to exercise it, and then to try again without cease.

Witness to the reality of this higher nature is borne every day. Condorcet in the shadow of the guillotine busying himself on a sketch of the future progress of the human race; Spinoza putting by the offer of the prince in order to preserve his intellectual freedom; Robert Louis Stevenson, racked by tuberculosis, yet sending out his brave words to weaker fellow mortals; Louis Pasteur, stricken with paralysis, but forcing himself to dictate notes on his scientific finds—these, and all others who rise above the impulses natural enough to beings of clay, in order to assert the worthier human promptings, illustrate, if only in limited measure, what freedom at its best can mean. To help all men release in themselves that which liberates the highest life in their fellow beings is the aim that makes our external freedoms worth developing.

Neumann, Henry, *Education for Moral Growth* (New York, Appleton, 1924), pp. 29-30.

120

The Ideal Is Real, and the Real Ideal

The real which can express itself in systematic knowledge must itself be a system, and not a collection of discrete entities. The moral agent who can raise himself and his world to the condition in which they "ought to be," must contain the possibilities of that change within himself and find them also in his world. Thus the opposition between the actual and the ideal falls within the real: or in other words, the actual which was condemned as not in accord with what "ought to be," and therefore evil, contains the possibility of its own better state. Hence, knowledge and morality do not seek to bring a new order of existence into being. The former does not introduce system into a chaotic agglomerate of phenomena, nor does morality substitute a good universe for a bad. Knowledge, in so far as it is valid, *discovers* the order already existent in the world; and a moral agent, in so far as his actions are good, *reveals* the ideality of the world, recognizing and obeying its laws and making himself their willing instrument. In both these activities man's function is repetitive: his thoughts and his volitions, in so far as the former are valid and the latter good, acquiesce in and reproduce the objective order. He appropriates that order in his personality, making his mind the mirror of *its* truth and his will the instrument of its *purpose*. And, moreover, it is only *in* this process that the world appears as real and as good. Man realizes himself by means of it, and it reveals its nature by means of man.

I must dwell for a little upon this matter, for it contains the essential message of Idealism.

It means that, both in his cognitive and in his moral activities, man finds his ideals *in* the world. That this is true as regards knowledge is easily seen. The universe *as it stands* is manifestly the criterion of man's cognitive attainments. No one ever sought other knowledge than the knowledge of that which is. To seek false knowledge, that is, knowledge which did not accord with, or express that which is real, were absurd. Hence every effort after a rational interpretation of reality, which knowledge is, proceeds on the assumption that the reality to be interpreted is itself rational. Reason refuses to deal with what is irrational; for instance, no mathematician will try to prove that the three angles of a triangle are together equal to three right angles, nor will a physicist seek to invent a perpetually moving machine. It is only because the world is believed to have meaning that we seek to spell out its cryptogram: were we persuaded that it has no meaning our intelligence could not occupy itself with it in any way. The scepticism which denies the objective order, or the rationality of the world, destroys the *occasion* for knowledge: and is, of course, inconsistent with itself. But even to the sceptic the world is the standard of truth: for he assumes that he has grounds for his assertion of its discontinuity and irrationality, and these grounds are in that world itself. Thus, whether we seek to know that which is real or despair of knowing it, it remains the criterion of our intellectual attainment or failure: the world *as it is* is the ideal of knowledge, whether we deem that we can attain the ideal or not.

But to say that the *world as it stands* furnishes the ideal and the criterion of the *moral* life may well seem to be nothing better than wanton paradox: so obvious is it that the very nisus of that life is the conviction that things are not as they ought to be and must be changed. Nevertheless, I believe it can be shown that upon no other assumption is the moral life possible; and that in this respect our moral is strictly parallel with our intellectual life. As we do not create the objective world in knowing it, so we do not create the moral world by our moral action. The process of morality is a process of interpretation, of obedience, and of the appropriation of that which is, and which is deemed right or good. As we wrong the world by assuming that it awaits the systematizing activity of our intelligence in order to escape from a condition of chaotic disconnectedness; so also we wrong the world of morality by assuming that it waits upon our activity to introduce into it a law of righteousness to which it is itself foreign. As in knowledge we strive to interpret and simply to *accept* the rational order without disturbing it by any prejudices of our own, and as all our activity consists in widening our capacities to the measure of its being—throwing open the windows of the soul; so it is in morality. Its aspiration is also after concord with everlasting law, and its prayer is "*Thy* will *be* done."

Thus, in both cases it is presumed that the ideal is real, and the real ideal; and that our one mission as spiritual beings is to make this presupposition good within ourselves in actual experience. We may think meanly enough of our own acquirements: our knowledge may fail on every hand and our righteousness be "as filthy rags"; but the goal on which our souls are set, however hopelessly, is nothing less than perfection. Indeed, our very despair is but an indication of our belief in the Truth and Goodness, which we fail to attain; and it is in their presence that we discover our littleness. At the very heart of our spiritual activities there thus remains an indomitable Optimism, which the religious consciousness calls "trust in God." The universe, which is the object of our rational intelligence and will, stands forth justified. Knowledge and morality imply their "absolute," no less than religion.

JONES, SIR HENRY, *Idealism as a Practical Creed* (Glasgow, MacLehose [Present publisher, Jackson, Son & Co., Glasgow], 1910), pp. 268-273.

121

Satisfaction and Unconditioned Obligation

To keep in the foreground the fact that there is such a reality as a moral universe, sometimes coincident with a world of desires and sometimes not, does not have to lead us, as Professor Dewey fears, to subscribe to the ideals of the Prussian drill-master. The reality of absolutes is not at all disproved by the egregious conceit of some Germans in identifying the absolute with the will of the Prussian state. Subjectivism is every whit as likely to lead to grave abuses. As Bertrand Russell remarks, if truth exists over and beyond our thoughts about it, then, in case we disagree, we can at least have some assurance that our dispute can be brought for pacific settlement to an absolutely just tribunal: The right will decide. But if there is no such reality, the appeal to "satisfaction" and "successful working" may very easily lead to justifying success on the ground that it is success, that is, might makes right. If it is indeed a fact that our ideals represent chiefly, if not entirely, the rationalizing of our desires, we might give up the attempt to understand one another. If Kant, for example, is talking not truth but only Kantianism, how can we be so sure that Pragmatists are talking not truth but only Pragmatist prejudice? If there are no absolute standards, opponents may never hope to come to the accord of reason. But if absolute rightness exists, we know that there is a ground on which we can unite. And it certainly does not follow that the assertion of absolutes and the quest for such places of agreement need be any more conducive to brute strife than the pitting of one desire against another.

Democracy need have no fear of the idea of unconditioned obligation. It cannot afford to have young people grow up unaware that the difference between right and wrong is not a matter of preference but the most objective of realities. Grant that the laws of human society are framed in response to nothing more sacred than a desire to escape trouble and that the rules of today should be superseded when tomorrow brings new needs. Grant also that man errs tragically in formulating at any given time the rules he thinks necessary to prevent disorder. But, for all our blunders, rightness remains something other than desirability; a real moral order exists over and beyond the happiest of social arrangements men ever work out; and, at the very least, the life of a democracy will be no less livable, we may be sure, when its children are reared in an earnest appreciation of this basic fact.

Neumann, Henry, *Education for Moral Growth* (New York, Appleton, 1924), pp. 180-181.

122

Is Ultimate Reality Mechanical and Material or Mental?

Yet the fact that the search for a physical reality underlying the mathematical description of nature has so far failed does not of course imply that the search must for ever fail. We must admit it as conceivable that the further advances of science may yet clothe our present mathematical abstractions in new dresses of physical reality, and possibly even of material substance. It is not easy to imagine how formulae in which $\sqrt{-1}$ plays such a prominent part can admit of such an interpretation, yet with the surprising and kaleidoscopic changes of recent years still fresh in our minds, we cannot disregard the possibility. It is, however, so far out of the range of our vision at the present moment, that it is idle to speculate as to what the new dress may be. It may perchance restore mechanical properties to nature, space-time may prove to be a real substantial island floating in something which is not space-time, and so on—nothing can be ruled out as impossible.

Or it may be that no such substantial or material dress will ever be found, and that our knowledge of the universe will for ever remain similar in kind to our present knowledge, a knowledge of our perceptions expressed as a group of mathematical formulae stamped with the stamp of the pure mathematician—the kind of formulae which result from the operation of thought working within its own sphere. In such an event, there may or may not be a non-mental reality behind the form; if there is, it will be beyond our scientific capacity to imagine.

All these possibilities are in the field, since all refer to the future and the unknown. Our positive knowledge of the road along which science is travelling is confined to that which lies behind it. We cannot say how much farther, if at all, the road extends in front, or what the far end of it is like; at best we can only guess.

Some may think that the most plausible conjecture is that the end of the road will be like what is at the half-way house, or perhaps more so. We have already described recent progress in physical science as resulting from a continuous emancipation from the purely human point of view. Our last impression of nature, before we began to take our human spectacles off, was of an ocean of mechanism surrounding us on all sides. As we gradually discard our spectacles, we see mechanical concepts continually giving place to mental. If from the nature of things we can never discard them entirely, we may yet conjecture that the effect of doing so would be the total disappearance of matter and mechanism, mind reigning supreme and alone.

Others may think it more likely that the pendulum will swing back in time.

Broadly speaking, the two conjectures are those of the idealist and realist—or, if we prefer, the mentalist and materialist—views of nature. So far the pendulum shows no signs of swinging back, and the law and order which we find in the universe are most easily described—and also, I think, most easily explained—in the language of idealism. Thus, subject to the reservations already mentioned, we may say that present-day science is favorable to idealism. In brief, idealism has always maintained that, as the beginning of the road by which we explore nature is mental, the chances are that the end also will be mental. To this present-day science adds that, at the farthest point she has so far reached, much, and possibly all, that was not mental has disappeared, and nothing new has come in that is not mental. Yet who shall say what we may find awaiting us round the next corner?

JEANS, SIR JAMES H., *The New Background of Science* (New York, Macmillan, 1933), pp. 294-296.

CHAPTER VI

Values of Life

IN THE preceding chapters we have considered the general question, What is a philosophy of education? and have presented several types of philosophy which underlie different kinds of educational practice. The next step is to consider the aim of education. Stated in the most general terms, the aim of education is to enable the learner to realize certain values of life. The purpose of this chapter is to set forth some of these values.

The student should read the selected quotations carefully. The thought expressed in many of them is not new, but they represent a good deal of the wisdom and tested experience of the race. That ancient teachings and modern science are not necessarily at variance is well illustrated by the quotation from Millikan (148). So the quotation from Schaeffer (126), while it may appear trite to some, no doubt calls attention to a fundamental and permanent value of life. Certainly the Christian spirit of love (136) is of supreme value in individual and social life.

123

The Mind Its Own Place

The mind is its own place, and in itself
Can make a Heaven of Hell, a Hell of Heaven.

MILTON, JOHN, *Paradise Lost,* Book I, ll. 254-255.

124

Five Principles of Life

The Epicurean says, "Take into your life as many simple, natural pleasures as possible." The Stoic says, "Keep out of your mind all causes of anxiety and grief." The Platonist says, "Lift up your soul above the dust and drudgery of daily life into the pure atmosphere of the perfect and the good." The Aristotelian says, "Organize your life by clear conceptions of the end for which you are living, seek diligently all means that further this end and rigidly exclude all that hinders it or distracts you from it." The Christian says, "Enlarge your spirit to include the interests and aims of all persons whom your life in any way affects."

Any man or woman of average hereditary gifts, and ordinary scholarship and training, who puts these five principles into practice will be a popular, effective, happy, and successful teacher.

Hyde, William DeWitt, *The Teacher's Philosophy* (Boston, Houghton Mifflin, 1910), p. 53.

125

Ideals Give Value to Life

It is our ideals that give value to life; they put into our experience those qualities we deem most valuable. They are the compass or the star by which we steer our course in safety and peace. Values come into human experience through the ability of ideals tenaciously held to regulate experience. Choices made in accordance with ideals introduce the worthier elements into human life, eschewing the less worthy. Ideals also motivate life; that is, they give motion and power. By giving us something worthy to live for and to live by, they call out the latent powers of our being. So ideals are valuable because (1) they introduce values into life; (2) they regulate life; and (3) they motivate life. In fact, without ideals man lives out an animal rather than human existence.

HORNE, HERMAN HARRELL, *Jesus Our Standard* (New York, Abingdon, 1918), p. 20.

126

What Makes Life Worth Living

That which makes life worth living is the life of love. In the thirteenth chapter of First Corinthians, which is a poem, though lacking metre and rhyme, Paul speaks of faith, hope, and charity, and says that, of these three, the greatest is charity, or love, as the Revised Version translates it. Faith shall be changed to sight, and hope to glad fruition, but love shall abide forever. Throughout the ceaseless ages of eternity, love of the truth, as it is in Jesus,—yea, man's love for his Maker and his Saviour, and for the whole glorious company of the redeemed,—will continue to glow and to grow, lifting the soul to ever loftier heights of ecstasy and bliss. A foretaste of this ecstatic bliss is possible in this life. Love of home and country, of kindred and friends, of truth and righteousness, of beauty in all its forms, of goodness of every kind, up to the highest forms of the good, gives life on earth a heavenly charm. Even in this world, the love that binds human hearts, that makes homes and brotherhoods, that issues in deeds of kindness, friendship, and charity, is bringing more happiness to the race than all other agencies combined.

"The night has a thousand eyes,
  And the day but one;
Yet the light of the whole world dies
  With the setting sun.

The mind has a thousand eyes,
  And the heart but one;
But the light of a whole life dies
  When love is done."

SCHAEFFER, NATHAN C., *Thinking and Learning to Think* (Philadelphia, Lippincott, 1906), pp. 350-351.

127

Value of a Good Name

Good name in man and woman, dear my lord,
Is the immediate jewel of their souls:
Who steals my purse steals trash; 'tis something, nothing;
'Twas mine, 'tis his and has been slave to thousands;
But he that filches from me my good name
Robs me of that which not enriches him
And makes me poor indeed.

SHAKESPEARE, WILLIAM, *Othello,* Act III, Scene 3.

128

Wisdom

Happy is the man that findeth wisdom, and the man that getteth understanding: For the merchandise of it is better than the merchandise of silver, and the gain thereof than fine gold. She is more precious than rubies; and all the things thou canst desire are not to be compared unto her. Length of days is in her right hand; and in her left hand, riches and honour. Her ways are ways of pleasantness, and all her paths are peace. She is a tree of life to them that lay hold upon her; and happy is every one that retaineth her.

Holy Bible, Proverbs, Chapter III, Verses 13-18.

129

The Bottom Fact of Ethics

This is the bottom fact of ethics. Different experiences have different intrinsic worth as they pass. There is a chiaroscuro of consciousness, a light and shade of immediate goodness and badness over all our variegated moments. The good moments are their own excuse for being, a part of the brightness and worth of life. They need nothing ulterior to justify them. The bad moments feel bad, and that is the end of it; they are bad-feeling moments, and no sophistication can deny it. Conscious life looked at from this point of view, and abstracted from all its other aspects, is a flux of plus and minus values. Certain of its moments have a greater felt worth than others; some experiences are intrinsically undesirable, the shadows of life; others intrinsically sweet, a part of its sunshine. In the last analysis, all differences in value, including all moral distinctions, rest upon this disparity in the immediate worth of conscious states.

DRAKE, DURANT, *Problems of Conduct* (Boston, Houghton Mifflin, 1921), p. 74.

130

Men Worthy of Honor

Two men I honor, and no third. First, the toilworn Craftsman that with earth-made Implement laboriously conquers the Earth, and makes her man's. Venerable to me is the hard Hand; crooked, coarse; wherein notwithstanding lies a cunning virtue, indefeasibly royal, as of the scepter of this Planet. . . . A second man I honor, and still more highly: Him who is seen toiling for the spiritually indispensable; not daily bread, but the bread of Life. . . . If the poor and humble toil that we have Food, must not the high and glorious toil for him in return, that he have Light, have Guidance, have Freedom, Immortality? . . . These two, in all their degrees, I honor: all else is chaff and dust, which let the wind blow whither it listeth.

CARLYLE, THOMAS, *Sartor Resartus* (New York, Crowell, no date), pp. 235-236.

131

Omar's Philosophy

XVI

The Worldly Hope men set their Hearts upon
Turns ashes—or it prospers; and anon
Like snow upon the Desert's dusty Face,
Lighting a little hour or two—is gone.

XLVI

And fear not lest Existence closing your
Account, and mine, should know the like no more;
The Eternal Sáki from that Bowl has pour'd
Millions of Bubbles like us, and will pour.

LXVIII

We are no other than a moving row
Of Magic Shadow—shapes that come and go
Round with the Sun-illumined Lantern held
In Midnight by the Master of the Show.

OMAR KHAYYAM, *Rubáiyát* (Philadelphia, Altemus, no date).

132

The Whole Duty of Man

Let us hear the conclusion of the whole matter; fear God and keep his commandments for this is the whole duty of man. For God shall bring every work to judgment, with every secret thing, whether it be good or whether it be evil.

Holy Bible, Ecclesiastes, Chapter XII, Verses 13-14.

133

A Certain Blindness in Human Beings

Our judgments concerning the worth of things, big or little, depend on the feelings the things arouse in us. Where we judge a thing to be precious in consequence of the idea we frame of it, this is only because the idea is itself associated already with a feeling. If we were radically feelingless, and if ideas were the only things our mind could entertain, we should lose all our likes and dislikes at a stroke, and be unable to point to any one situation or experience in life more valuable or significant than any other.

Now the blindness in human beings, of which this discourse will treat, is the blindness with which we all are afflicted in regard to the feelings of creatures and people different from ourselves.

We are practical beings, each of us with limited functions and duties to perform. Each is bound to feel intensely the importance of his own duties and the significance of the situations that call these forth. But this feeling is in each of us a vital secret, for sympathy with which we vainly look to others. The others are too much absorbed in their own vital secrets to take an interest in ours. Hence the stupidity and injustice of our opinions, so far as they presume to decide in an absolute way on the value of other persons' conditions or ideals. . . .

* * *

Some years ago, while journeying in the mountains of North Carolina, I passed by a large number of "coves," as they call them there, or heads of small valleys between the hills, which had been newly cleared and planted. The impression on my mind was one of unmitigated squalor. The settler had in every case cut down the more manageable trees, and left their charred stumps standing. The larger trees he had girdled and killed, in order that their foliage should not cast a shade. He had then built a log cabin, plastering its chinks with clay, and had set up a tall zigzag rail fence around the scene of his havoc, to keep the pigs and cattle out. Finally, he had irregularly planted the intervals between the stumps and trees with Indian corn, which grew among the chips; and there he dwelt with his wife and babes—an axe, a gun, a few utensils, and some pigs and chickens feeding in the woods, being the sum total of his possessions.

The forest had been destroyed; and what had "improved" it out of existence was hideous, a sort of ulcer, without a single element of artificial grace to make up for the loss of Nature's beauty. Ugly, indeed, seemed the life of the squatter, scudding, as the sailors say, under bare poles, beginning again away back where our first ancestors started, and by hardly a single item the better off for all the achievements of the intervening generations.

Talk about going back to nature! I said to myself, oppressed by the dreariness, as I drove by. Talk of a country life for one's old age and for one's children! Never thus, with nothing but the bare ground and one's bare hands to fight the battle! Never, without the best spoils of culture woven in! The beauties and commodities gained by the centuries are sacred. They are our heritage and birthright. No modern person ought to be willing to live a day in such a state of rudimentariness and denudation.

Then I said to the mountaineer who was driving me, "What sort of people are they who have to make these new clearings?" "All of us," he replied. "Why, we ain't happy here, unless we are getting one of these coves under cultivation." I instantly felt that I had been losing the whole inward significance of the situation. Because to me the clearings spoke of naught but denudation, I thought that to those whose sturdy arms and obedient axes had made them they could tell no other story. But, when they looked on the hideous stumps, what they thought of was personal victory. The chips, the girdled trees, and the vile split rails spoke of honest sweat, persistent toil and final reward. The cabin was a warrant of safety for self and wife and babes. In short, the clearing, which to me was a mere ugly picture on the retina, was to them a symbol redolent with moral memories and sang a very paean of duty, struggle, and success.

I had been as blind to the peculiar ideality of their conditions as they certainly would also have been to the ideality of mine, had they had a peep at my strange indoor academic ways of life at Cambridge.

James, William, *Talks to Teachers* (New York, Holt, 1912), pp. 229-234.

134

Reality in the World-View of Jesus

Turning now to the central question of all philosophy, "What is Reality?" we answer that in the world-view of Jesus it is personality. His is a world essentially of persons. These include, first of all, God, the Father of all mankind, and also angels, men, Satan, and evil spirits. The agencies of the world are conscious and personal. Things happen because somebody wants them to happen (this is the religious viewpoint), not because they have to happen (this is the scientific viewpoint). The two views are reconcilable, if we use science only as a method of investigation, not as a philosophy. In this world of persons Jesus was conscious of himself as occupying a unique relation to the Father, to men, and to the works of Satan, "the prince of this world."

The whole world is the Father's house in which are many mansions. The Father works unceasingly, clothing the grass of the field, arraying the lilies with a beauty surpassing Solomon's man-made robes, feeding the ravens and the birds of the air, and entering into all the tragedies of life as well as its joys, knowing that man has need of meat and drink and clothing, and seeking spiritual worshipers, with whom all things are possible, and who alone knows of the day of the coming of the Son of man or the fruition of the kingdom of God on earth. Perhaps the most philosophical utterance of Jesus ever made was spoken to a single pupil, and that pupil a woman, and that woman not wise, namely, "God is spirit," indicating thereby an always present, self-conscious, divine personality, to be worshiped in spirit and in truth. This philosophy is that of Personal Idealism, and because God is not the sole Person, it is pluralistic.

HORNE, HERMAN HARRELL, *Jesus as a Philosopher* (New York, Abingdon, 1927), pp. 34-35.

135

Happiness

Happiness is an elevated joy, a beatitude which exists even amid pain and disease when the soul is triumphant over the body.

LORD, JOHN, in *Beacon Lights of History* (New York, Fords, 1903).

136

Charity or Love

Though I speak with the tongues of men and of angels, and have not charity, I am become as sounding brass, or a tinkling cymbal.

And though I have the gift of prophecy, and understand all mysteries, and all knowledge; and though I have all faith, so that I could remove mountains, and have not charity, I am nothing.

And though I bestow all my goods to feed the poor, and though I give my body to be burned, and have not charity, it profiteth me nothing.

Charity suffereth long, and is kind; charity envieth not; charity vaunteth not itself, is not puffed up;

Doth not behave itself unseemly, seeketh not her own, is not easily provoked, thinketh no evil;

Rejoiceth not in iniquity, but rejoiceth in the truth;

Beareth all things, believeth all things, hopeth all things, endureth all things:

Charity never faileth; but whether there be prophecies, they shall fail; whether there be tongues, they shall cease; whether there be knowledge, it shall vanish away.

For we know in part, and we prophesy in part.

But when that which is perfect is come, then that which is in part shall be done away.

When I was a child, I spake as a child, I understood as a child, I thought as a child: but when I became a man, I put away childish things.

For now we see through a glass, darkly; but then face to face: now I know in part; but then I shall know even as also I am known.

And now abideth faith, hope, charity, these three; but the greatest of these is charity.

The Apostle Paul, Corinthians, Chapter XIII.

137

Communion with Nature

And this our life exempt from public haunt
Finds tongues in trees, books in the running brooks,
Sermons in stones and good in everything.
I would not change it.

Shakespeare, William, *As You Like It,* Act II, Scene 1.

138

Sayings of Confucius

Refusal to instruct one who is competent to learn entails the waste of a man. Instruction of one who is incompetent to learn entails a waste of words. The wise man is he who wastes neither men nor words.

He who requires much from himself and little from others will be secure from hatred.

Only two classes of men never change: the wisest of the wise and the dullest of the dull.

Speaking to Tzu Lu, the Master said: Have you ever heard, Lu, of the six shadows which attend six several virtues? No, he replied. Sit down, then, and I will tell you. Love of goodness without the will to learn casts the shadow called foolishness. Love of knowledge without the will to learn casts the shadow called instability. Love of truth without the will to learn casts the shadow called insensibility. Love of candour without the will to learn casts the shadow called rudeness. Love of daring without the will to learn casts the shadow called turbulence. Love of firmness without the will to learn casts the shadow called eccentricity.

Giles, Herbert A., *The Sayings of Confucius* (London, Murray [American publisher, Dutton, New York] 1932), pp. 104, 107.

139

Thoughtful Living

Every moment think steadily as a Roman and a man to do what thou hast in hand with perfect and simple dignity, and feeling of affection and freedom, and justice, and to give thyself relief from all other thoughts. And thou wilt give thyself relief if thou doest every act of thy life as if it were the last, laying aside all carelessness and passionate aversion from the commands of reason, and all hypocrisy, and self-love, and discontent with the portion which has been given to thee. Thou seest how few the things are, the which if a man lays hold of, he is able to live a life which flows in quiet, and is like the existence of the gods, for the gods on their part will require nothing more from him who observes these things.

Aurelius Antoninus, Marcus, *Thoughts of an Emperor* (Philadelphia, Altemus, no date), pp. 104, 118.

140

What Do We Value?

If philosophy be an interpretation of experience as a whole, it is of philosophical importance to answer the question, What do we value? For philosophy wishes to discover, if possible, whether value be a mere incident in the universe or a part of the very structure of reality.

The question may be answered in two different ways. On the one hand, it may be held that we value only conscious experience. The value of a painting consists (according to one's psychological theory) in the pleasure it gives, or in the extent to which it realizes one's desire, or in its relation to the fulfillment of obligation, or in its contribution to the realization of my ideal of beauty in personal life; in any event, its value consists in a conscious experience.

On the other hand, it may be said that everything in the universe, conscious or unconscious, real or imaginary, has been or might be valued. In ordinary language we speak of valuing a Sistine Madonna or a friend; a good play or a landscape; mathematics or *Alice in Wonderland.*

Little consideration is needed to show that the two points of view are less diverse than appears. It is not the Sistine Madonna, as an ordered collection of protons and electrons, that we value; it is rather its effect on a mind or the attitude of mind toward it that constitutes its value. The significant fact for us, however, is that for some mind and from some point of view, it is conceivable, if not certain, that every fact in the universe may be valued.

It is one of the commonest facts of experience that we must choose among values; we cannot realize all values at the same time. If we choose one value in preference to another, what is the ground of our choice? Are there some values that are always and everywhere better than others? Is there any principle whereby values may be arranged in a scale of worth?

Such questions, whatever their practical and theoretical importance, are difficult to answer. It is evident, in the first place, that the answer depends largely on our psychological account of what valuation is. If values are pleasures, the standard of value is the amount of pleasure; but this standard is evanescent, because what pleases today may disgust tomorrow; what charms me may repel you. If values are satisfactions of desire, the standard is the strength of the desire; but this sounds perplexingly like "might makes right," and leaves the mind dissatisfied. If value be the realization of our ideal of personality, we have what is obviously a developing standard. It may be that such a standard is the only kind that will suit the nature of developing beings like ourselves.

Brightman, Edgar Sheffield, *An Introduction to Philosophy* (New York, Holt, 1925), pp. 142-143.

141

Happiness

Not, that which produces happiness is good; but, that only which is good produces happiness.

Fichte's Popular Works (translated by Smith, William; London, Trübner, 1889), Vol. I, p. 155.

142

The Highest of All Arts

The highest of all Arts is the Art of living well. Beyond the beauty of Sculpture, or Painting, or Music, or Poetry, is the beauty of a well-spent life. Here all can be Artists. Every man can be a hero. Obedience to the command, "Be ye perfect even as your Father in Heaven is perfect," would ally man to God, and make earth a Paradise.

Wickersham, James Pyle, *Methods of Instruction* (Philadelphia, Lippincott, 1866), p. 496.

143

Life a Train of Moods

Life is a train of moods like a string of beads, and, as we pass through them, they prove to be many-colored lenses which paint the world their own hue, and each shows only what lies in its focus. . . . Temperament is the iron wire on which the beads are strung.

Emerson, Ralph Waldo, *Essays* (New York, Caldwell), Vol. 2, pp. 43-44.

144

Life a Self-Evolving Circle

The key to every man is his thought. Sturdy and defying though he look, he has a helm which he obeys, which is the idea after which all his facts are classified. He can only be reformed by showing him a new idea, which commands his own. The life of man is a self-evolving circle, which, from a ring imperceptibly small, rushes on all sides outward to new and larger circles, and that without end. The extent to which this generation of circles, wheel without wheel, will go, depends on the force or truth of the individual soul. For it is the inert effort of each thought, having formed itself into a circular wave of circumstances, as for instance an empire, rules of an art, a local usage, a religious rite, to heap itself on that ridge and to solidify and hem in the life. But if the soul is quick and strong it bursts over that boundary on all sides and expands another orbit on the great deep, which also runs up into a high wave, with attempt again to stop and to bind. But the heart refuses to be imprisoned; in its first and narrowest pulses it already tends outward with a vast force and to immense and innumerable expansions.

Emerson, Ralph Waldo, *Essays* (New York, Caldwell), Vol. 1, pp. 255-256.

145

Life a Warfare and Pilgrimage

The time of a man's life is as a point; the substance of it ever flowing, the sense obscure; and the whole composition of the body tending to corruption. His soul is restless, fortune uncertain, and fame doubtful; to be brief, as a stream, so are all things belonging to the body; as a dream, or as a smoke, so are all that belong unto the soul. Our life is a warfare, and a mere pilgrimage. Fame after life is no better than oblivion. What is it then that will adhere and follow? Only one thing, philosophy. And philosophy doth consist in this, for a man to preserve that spirit which is within him, from all manner of contumelies and injuries, and above all pains or pleasures; never to do anything either rashly, or feignedly, or hypocritically; wholly to depend upon himself, and his own proper actions; all things that happen unto him to embrace contentedly, as coming from Him from whom he himself also came; and above all things, with all meekness and a calm cheerfulness, to expect death, as being nothing else but the resolution of those elements, of which every creature is composed. And if the elements themselves suffer nothing by this their perpetual conversion of one into another, that dissolution, and alteration, which is so common unto all, why should it be feared by any? Is not this according to nature? But nothing that is according to nature can be evil.

AURELIUS ANTONINUS, MARCUS, *The Golden Book* (translated by Casaubon; Everyman's Library Edition; New York, Dutton, 1906), p. 17.

146

Be Good for Thine Own Nature's Sake

Whatsoever any man either doth or saith, thou must be good; not for any man's sake, but for thine own nature's sake; as if either gold, or the emerald, or purple, should ever be saying to themselves, Whatsoever any man either doth or saith, I must still be an emerald, and I must keep my colour.

AURELIUS ANTONINUS, MARCUS, *The Golden Book* (translated by Casaubon; Everyman's Library Edition; New York, Dutton, 1906), p. 75.

147

Honesty and Justice, Condition of Co-operation

Honesty and justice are the fundamental conditions of co-operation. But alone they are not enough. Experience shows that in the long run those businesses are most successful in which the relation of co-operation between employer and employed, and also between the firm and its "connexion," has in it an element which goes beyond honesty; where the spirit all round is one which prefers, if it must err at all, to err on the side of generosity. Indeed, real honesty is only possible in a society where the majority have generous instincts—where buyers are willing to give a fair price and producers desire to do the best that can be done at that price. A survey of the great old-established businesses of the commercial world will show that firms which over a long period have acquired a reputation for honesty of this generous quality acquire a connexion which treats them in the same spirit. And if ever, as does occasionally happen, such a firm declines, the cause will be, not its adherence to the higher business morality, but the fact that its management has fallen into the hands of men less enterprising, less intelligent, or less industrious—sometimes, even, the abandonment by a new generation of the old tradition of fair dealing which was the source of the firm's good name.

Streeter, Burnett Hillman, *Reality* (New York, Macmillan, 1928), pp. 167-168.

148

Modern Science and the Teaching of Jesus

Through the careful study of the way the rocks lie on our hillsides we have found evidence for the growth of this earth through a billion years at least. Through the study of radioactivity and other physical processes we have found definite evidence that the world is evolving and changing all the time, even in its chemical elements. By a minute study of the comparative anatomies of all kinds of animals and by reading the history of life through fossils we have found evidence of progression, evidence of a continuous movement from the lower up to the higher forms, and through the study of history and the observation of what is going on under our eyes at the present time a new conception, a conception of progress, has entered the thought of the world, a progress in which we play an important part, a progress the key to which is to a considerable extent, at least, in our own hands. The picture which the development of science and the scientific method has brought into the world of a continual increase in control over environment is the dominant note in the fourth stage in the evolution of religion. No conception of God which has ever come into human thinking has been half so productive of effort on the part of man to change bad conditions as has this new modern conception of progress, this conception that man himself plays a part in the scheme of evolution, this conception which has arisen because of work like that of Galileo, like that of Pasteur, and especially like that of Franklin and Faraday, that it is possible in increasing measure for us to know and to control nature; this conception, inevitably introduced into human thinking by the stupendous strides which have been made in the past century, that there are perhaps limit-less possibilities ahead through the use of the scientific method for the enrichment of life and the development of the race.

In this sense the idea that nature is at bottom benevolent has now become well-nigh universal. It is a contribution of science to religion, and a powerful extension or modification of the idea that Jesus had seen so clearly and preached so persistently. He had felt that benevolence and then preached it as a duty among men. Modern science has brought forward evidence for its belief. True, it has changed somewhat the conception and the emphasis, as was to have been expected, for it is this constant change in conception with the advance of thought and of knowledge that we are here attempting to follow; but the practical preaching of modern science—and it is the most insistent and effective preacher in the world today—is extraordinarily like the preaching of Jesus. Its keynote is service, the subordination of the individual to the good of the whole. Jesus preached it as a duty—for the sake of world-salvation. Science preaches it as a duty—for the sake of world progress. Jesus also preached the joy and the satisfaction of service. "He that findeth his life shall lose it, and he that loseth his life . . . shall find it." When the modern scientist says he does it "for the fun of it" or "for the satisfaction he gets out of it," he is only translating the words of Jesus into the modern vernacular. It would be hard to find a closer parallel.

MILLIKAN, ROBERT A., *Evolution in Science and Religion* (New Haven, Yale University Press, 1927), pp. 80-83.

CHAPTER VII

Aims of Education

THIS chapter contains a number of statements relative to the aims of education. According to Tracy, for example, the aim is the realization of the ideal personality (149); according to Bagley it is to instill ideals that will function as judgments, and to develop moral character (150); according to Bode it is to foster intellectual and spiritual growth (151); according to Miller it is the attainment of right judgment, appreciation, and control of the values of life (152).

Several other aims listed in the chapter are human perfection, adjustment to the realities of life, preparation for complete living, the nurture of the human spirit, training for the work of after life, and developing a philosophy of life. Millikan's statement as to the main purpose of education (181) is especially timely and should be taken to heart by every student.

149

The True End of All Education

The true end of all education is the complete realization of the ideal of personality. The character of this ideal cannot be determined by physical, biological, or even psychological considerations, taken by themselves, but must be defined in the broadest and most comprehensive terms, with moral and spiritual criteria as the final determinants of value. The ideal product of the educational process is a balanced personality; one whose body is the perfect servant of his will, carrying into effect the behests of a trained intelligence and the requirements of a scrupulous conscience; whose judgment is so disciplined as not to be readily turned aside by falsehood or befogged by sophistry; whose emotions are deep and strong, but under perfect control; and whose conduct is consistently directed in accordance with the requirements of truth and goodness.

TRACY, FREDERICK, *The Psychology of Adolescence* (New York, Macmillan, 1920), p. 230.

150

The Main Aim in Education

It is safe to assert that the main aim in education is to instill ideals that will function as judgments, and that, in one sense at least, the subject-matter of instruction must be totally subservient to this aim. The classical education of the past undoubtedly had little worth in so far as the intrinsic value of its subject-matter was concerned; but it has immeasurable worth in so far as the ideals that it instilled were concerned. If the new education fails to develop equally effective ideals, its mission will result in a net loss, no matter how thoroughly it may succeed from its own intrinsic standpoint. Mark Hopkins on one end of a log and ambitious youth on the other end are no less the type of a true college today than in the boyhood of Garfield.

BAGLEY, WILLIAM C., *The Educative Process* (New York, Macmillan, 1917), pp. 220-221.

151

Fostering Intellectual and Spiritual Growth

Perhaps the most desirable and significant educational ideal for us to adopt is that of fostering intellectual and spiritual growth. If this be the case, then the aim of education, in so far as education can be said to have an inclusive aim, is to provide as adequately as possible for the creation of new aims. Life is a process in which the present is continuously enlarged and transformed. Present achievements become stepping-stones to further achievements; present appreciations prepare the way for further appreciations; present growth gives capacity for further growth. To set up fixed, inclusive ends in advance is to ignore the fact that life is too varied and too expansive to observe such limits. Our horizon retreats as we proceed, our aims and ideals change with the changes in our environment and with our growth in intellectual stature. It is precisely in this progressive self-expression, this enlargement of capacity, this continuous enrichment of experience, that life finds its fulfillment and its sufficient excuse for being.

BODE, BOYD H., *Fundamentals of Education* (New York, Macmillan, 1921), pp. 11-12.

152

The Function of Education

We are seeking the aim of education in some function which it performs in meeting the needs of life. But conscious, or intentional, education is designed to aid the natural processes and bring them up to a higher level of efficiency. . . . The question of education is in large part one of training pupils in right judgment of values. They must learn how to determine for themselves what things in life are really most worth while, if they are to play their part well in the modern world. . . .

From the point of view of the individual concerned in the educative process, the aim of education might be formulated as follows: the function of education is to assist pupils in the attainment of right judgment, appreciation, and control of the values of life.

MILLER, IRVING E., *Education for the Needs of Life* (New York, Macmillan, 1922), pp. 53, 58, 59.

153

The Aim of All Well Directed Education

Human perfection is the grand aim of all well directed education. The teacher has ever present with him his ideal man whose perfections he would realize in the children committed to his care, as the sculptor would realize the pure forms of his imagination in the rough marble that lies unchiseled before him. Embraced in this great end of education there are several subordinate ends, that of gaining knowledge, that of attaining discipline, that of lifting up the mind to the contemplation of pure beauty, truth, and excellence, and that of fitting ourselves to perform in the best manner possible all our duties to man and to God.

WICKERSHAM, JAMES PYLE, *Methods of Instruction* (Philadelphia, Lippincott, 1866), p. 34.

154

Education for Direct Self-Preservation

This, however, is by no means all that is comprehended in the education that prepares for direct self-preservation. Besides guarding the body against mechanical damage or destruction, it has to guard against injury from other causes—against the disease and death that follow breaches of physiologic law. For complete living it is necessary, not only that sudden annihilations of life shall be warded off, but also that there shall be escaped the incapacities and slow annihilation which unwise habits entail. As, without health and energy, the industrial, the parental, the social, and all other activities become more or less impossible, it is clear that this secondary kind of direct self-preservation is only less important than the primary kind, and that knowledge tending to secure it should rank very high.

If anyone doubts the importance of an acquaintance with the fundamental principles of physiology as a means to complete living, let him look around and see how many men and women he can find in middle or later life who are thoroughly well. Occasionally only do we meet with an example of vigorous health continued to old age; hourly do we meet with examples of acute disorder, chronic ailment, general debility, premature decrepitude. Scarcely is there one to whom you put the question who has not in the course of his life, brought upon himself illnesses which a little information would have saved him from.

Spencer, Herbert, *Education* (Syracuse, Bardeen, 1894), pp. 30, 31, 32.

155

Characteristics of the Ideally Educated Person

1. He is physically fit.
2. He lives near the maximum of his efficiency.
3. He has a body which is the ready servant of his will.
4. He is capable of earning for himself.
5. He is constantly doing his work better and better through study.
6. He knows about the human factors of the situations of which he is a part.
7. He regards other persons as having the same rights as himself.
8. His social interests are constantly widening.
9. He keeps old friends and makes new ones.
10. He is indignant at social wrongs.
11. He is a suitable life-partner for another, or becoming so.
12. He is tolerant of opinions different from his own.
13. He has good will toward all sorts and conditions of people.
14. He gives wisely of himself and his means.
15. He stands for the welfare of the larger group in the clash of human interests.
16. He holds existing social arrangements to be improvable.
17. His loyalty extends beyond family and friends to good causes.
18. He is self-controlled without being inert, and active without being nervous.

19. He loves nature.
20. He prizes the creative more than the possessive.
21. His intellectual horizon is constantly expanding.
22. His opinions are based on evidence, not on emotional attitudes.
23. He is careful in expressing judgments.
24. He is good company to himself.
25. His is a happy life.
26. He can enjoy a vacation.
27. He prefers that useful articles be also aesthetic.
28. He has the courage to do right against odds.
29. He feels at ease in the presence of those greater than himself.
30. He can make something with his hands.
31. He is democratic in his attitudes.
32. He can play with children and have a truly fine time.
33. He senses his kinship with all men and with the Reality of which they are an express part.

HORNE, HERMAN HARRELL, *This New Education* (New York, Abingdon, 1931), pp. 126-136.

156

Creating a Way of Living

The objective remains the discovery or creation of a way of living which conserves and produces as many values as possible for as many persons as possible over as long a time as possible. Character education is the facilitation of this way of life.

Character education built upon the integration of values in the day-by-day choices of pupils as they meet the major life situations will, of course, permeate the whole curriculum. Economic problems must be solved. Friendships must be made and preserved. Health must be achieved. Home life must be enriched. Recreational opportunities call for discrimination. Situations arise in connection with the use of money, the exploration of the universe, the contribution of the individual to government, all of which are part of the curriculum which the individual must master, in school or out, and which are enormously significant for the happiness of the individual and of others. Since the objective of character education is the creation in each situation of the best solution, the curriculum must be not only vital but active. Solutions are not created by theory alone. They must be worked into the design of life processes. . . .

The old structure passes. Religion, morality, business, family, school, and state change. Many forms under which generations lived worthily and died content have been outgrown. To see only the emergence of life from the older patterns awakens some forebodings. What instead? Is the goal chaos? To look into the meaning of the civilization and culture that lie behind, and to gather the essence of past contributions into a new integration, shaped to modern social needs, is the creative opportunity of the educator.

NATIONAL EDUCATION ASSOCIATION (Department of Superintendence), *Tenth Yearbook* (1932), p. 59.

157

The Seed-Time of Character

Childhood is the seed-time of character, for it is then that the subconscious is planted with suggestions which become nuclei for whole systems of thought which later ripen into habits.

ROSS, EDWARD ALSWORTH, *Outlines of Sociology* (New York, Century, 1923), p. 83.

158

Objectives Historically Considered

All great teachers for over two thousand years have formulated the objectives of education systematically, and many of those teachers have recorded their views upon the matter. Consequently, there have been numerous systems of objectives. By analyzing a score or more of these systems, one discovers, first, that the principal difference among them is that certain theorists have been more specific than others. Analysis shows second, that, taken in their full context, these systems vary little in the connotation intended by their authors, and that no confusion need arise from the multiplicity of terms employed by different theorists.

Certain modern philosophers of education may chide the ancients for indefiniteness. The ancient might as well rebuke the moderns for their lack of systematic philosophy. As early as the fourth century, B.C., Isocrates stated his objectives in the following terms: (1) the cultivation of breadth of view, which he explains in terms of language activities, general social activities, and mental fitness; (2) the cultivation of desirable moral attitudes, which connoted citizenship activities; and (3) the cultivation of an ideal of thoroughness and solid work, which, for the adolescents in question, included non-vocational and vocational, practical activities.

UHL, WILLIS L., *The Supervision of Secondary Subjects* (New York, Appleton, 1929), pp. 3-4.

159

Conserve the Values of the Past

The existence of universities implies there is something, perhaps much, in the past for which it is worth while to fight, to which it is worth while to cling; and that there is something—no one knows how much—which we may ourselves do to mold to our liking the civilization of the future. Man, as Professor Woodbridge has admirably said, "is not content to take nature as he finds her. He insists on making her over." But the modern world—no matter how new we think it to be—is rooted in a past, which is the soil out of which we grow, a past during which poets and scientists and thinkers and peoples have accumulated treasures of truth, beauty, and knowledge, experience, social, political, and other, which only a wastrel would ignore. On the other hand, science, democracy, and other forces steadily increasing in intensity are creating a different world of which universities must take account.

A university should not be a weather vane, responsive to every variation of popular whim. Universities must at times give society, not what society wants, but what it needs. Inertia and resistance have their uses, provided they be based on reasonable analysis, on a sense of values, not on mere habit. In response to the criticism that universities lag, instances in plenty can—and will—be given by way of showing that universities are not mutually exclusive. Universities are complex and organic institutions; their arms may be sound, while both legs may be broken. They may lag fundamentally, even while superficially catering to whim or fashion; they may lag fundamentally at the very moment when at this or that point they are as expert as newspapers and politicians in catching the current breeze. A proper amount of critical resistance, based on a sense of values, would—as we shall see—save them from absurd, almost disastrous blunders.

FLEXNER, ABRAHAM, *Universities—American, English, German* (New York, Oxford University Press, 1930), pp. 4-6.

160

Creative Thought

Few of us are capable of engaging in creative thought, but some of us can at least come to distinguish it from other and inferior kinds of thought and accord to it the esteem that it merits as the greatest treasure of the past and the only hope of the future.

ROBINSON, JAMES HARVEY, *The Mind in the Making* (New York, Harper, 1921), p. 62.

161

Bacon on Studies

Studies serve for pastimes, for ornaments, for abilities; their chief use for pastimes is in privateness and retiring; for ornaments in discourse; and for ability in judgment; for expert men can execute, but learned men are more fit to judge and censure. To spend too much time in them is sloth; to use them too much for ornament is affectation; to make judgment wholly by their rules is the humour of a scholar; they perfect nature, and are themselves perfected by experience, crafty men condemn them, wise men use them, simple men admire them; for they teach not their own use, but that there is a wisdom without them and above them won by observation. Read not to contradict, nor to believe, but to weigh and to consider. Some books are to be tasted, others to be swallowed, and some few to be chewed and digested; that is, some are to be read only in parts, others to be read but curiously, and some few to be read wholly with diligence and attention. Reading maketh a full man, conference a ready man, and writing an exact man; therefore, if a man write little, he had need have a great memory; if he confer little, he had need have a present wit; and if he read little, he had need have much cunning to seem to know that he doth not. Histories make wise men; poets witty; the mathematics subtile; natural philosophy deep; moral grave; logic and rhetoric able to contend.

Bacon, Francis, *Essays: or, Counsels, Civil and Moral* (New York, Burt, 1883), pp. 13-14.

162

Limitations of Knowledge

Human intelligence has its limits. We can neither know everything, nor be thoroughly acquainted with the little that other men know. Since the reverse of every false proposition is a truth, the number of truths, like the number of errors, is inexhaustible. We have to select what is to be taught as well as the time for learning it. Of the kinds of knowledge within our power some are false, some useless, some serve only to foster pride. Only the few that really conduce to our well-being are worthy of the study of a wise man, or by a youth intended to be a wise man. The question is, not what may be known, but what will be of the most use when it is known. From these few we must again deduct such as require a ripeness of understanding and a knowledge of human relations which a child cannot possibly acquire; such as, though true in themselves, incline an inexperienced mind to judge wrongly of other things.

Rousseau, Jean Jacques (translated by Worthington; Boston, Heath, 1883), p. 123.

163

The Final Aim Is Ethical

At the risk of multiplying terms needlessly, it may be profitable to discriminate between aims of education in this way: The aim or purpose or function may be termed empirical, while the ultimate or final aim may be termed ethical. It is the empirical aim of education to fix experiences that shall modify adjustment. It is the ethical aim to fix those experiences that shall modify adjustment with reference to a certain definite end; those experiences that will make the individual a moral agent, or enable him to earn his own livelihood, or, perhaps, enable him to steal successfully. Dynamite explodes in the same way,—according to the same laws,—whether it is used as a harmless blast in a mine or to deal death and destruction at the will of an anarchist. Similarly, the principles of educational method work in the same way whether they are to produce a theologian or a thief.

Bagley, William C., *The Educative Process* (New York, Macmillan, 1922), p. 41.

164

Adjustment as an Aim

It may be defined from the biological standpoint as the adjustment of the individual to the life in which he must participate. In the process of adjustment education is not the only factor, for much is taken care of by instinct, but it is nevertheless an indispensable factor. By means of it man is especially adjusted to those elements of life that are characteristically human,—those elements that man alone possesses in any conspicuous degree. These are, briefly, the humanities, the natural sciences, and philosophy, on the one hand, and a cultivated and disciplined mind and refined conduct, on the other. The first of these, which imply instruction, may be described as objective or contentful, and the second, which imply training, as subjective or formal. These two classes of elements are obviously correlative, one implying the other, but they should both be explicitly stated in any complete definition of education, a fact that will become more and more evident as we proceed. Including them both, we may now say that to educate a person means to adjust him to those elements of his environment that are of concern in modern life, and to develop, organize, and train his powers so that he may make efficient and proper use of them.

Ruediger, William C., *Principles of Education* (Boston, Houghton Mifflin, 1909), pp. 39-40.

165

Change Human Beings for the Better

The aim of education is, as we have seen, to change human beings for the better, so that they will have more humane and useful wants and be more able to satisfy them.

Thorndike, Edward L., *Educational Psychology* (New York, Columbia University, Teachers College, 1912), p. 52.

166

Aims of the American Public School

Thus we see that the American public school systems, the laboratory of democracy, have three fundamental aims or purposes: First, the preparation of the individual as a prospective citizen and cooperating member of society; second, the preparation of the individual as a prospective worker and producer; third, the preparation of the individual for the proper use of his leisure time and the development of his personality. Every individual is at the same time a citizen, a worker, and a relatively independent personality. These three phases cannot be divorced, and in the laboratory of democracy preparation for no one of these phases of life should be neglected.

Frasier, George W., and Armentrout, Winfield O., *An Introduction to Education* (Chicago, Scott, 1924), pp. 262-263.

167

Competition for Position Intolerable as an Educational Ideal

An eminent American was once talking to me of the school system in the United States. The boast and glory of it, in his mind, was that every citizen born had a fair and equal start in life. Every one of them knew that he had a chance of becoming President of the Republic, and was spurred to energy by the hope. Here, too, you see a distinct object. Young Americans are all educated alike. The aim put before them is to get on. They are like runners in a race, set to push and shoulder for the best place, never to rest contented but to struggle forward in a never ending competition. It has answered its purpose in a new and unsettled country, where the centre of gravity has not yet determined its place; but I cannot think that such a system as this can be permanent, or that human society, constituted on such a principle, will ultimately be found tolerable. For one thing, the prizes of life so looked at are at best but few and the competitors many. "For myself," said the great Spinoza, "I am certain that the good of human life cannot lie in the possession of things which, for one man to possess, is for the rest to lose, but rather in things which all can possess alike and where one man's wealth promotes his neighbor's."

FROUDE, JAMES A., *Short Studies on Great Subjects—Second Series* (New York, Scribner, 1871), p. 321.

168

Aims of Education in a Democracy

The aims of education are usually established in the light of the needs of the individual and of the social order of which he is a part. The Social Order is interested in the training of each of the persons making up its citizenry, to intelligent participation in those activities which concern the welfare of the entire group. In an autocratic State, whether a monarchy or a dictatorship of the proletariat, the individualistic phases of education will be subordinated to the political and group phases. This point of view is supported by the conditions which existed in Imperialistic Germany before the World War, and which exist in Soviet Russia today. Under any autocratic political regime the child will be trained primarily with a view to the welfare of the State. Both the educational aims and the means of attaining those aims will be set up by the State.

In a representative democracy such as our own, on the contrary, the individualistic aims of education will tend to be stressed. Only such attention to the political and social aims will be given as is deemed essential to social cohesion. The people of a democracy hold firmly to the belief that the welfare of all is most apt to be promoted where each person has both the incentive and the opportunity to realize his maximum possibilities. It is on this account that the people of a democracy are willing to tax themselves heavily to support free public education. For the same reason a democratic social order permits freedom of thought and expression, within reasonable limits, upon political, social, and religious questions, and depends upon the operation of the law of enlightened self-interest to safeguard the general welfare.

Proctor, William M., *Educational and Vocational Guidance* (Boston, Houghton Mifflin, 1925), pp. 2-3.

169

Preparation for Complete Living

The aim of education is to prepare for complete living. To live completely means to be as useful as possible and to be happy. By usefulness is meant service, i. e., any activity which promotes the material or spiritual interests of mankind, one or both. To be happy one must enjoy both his work and his leisure.

The special aims of elementary education are:—(a) To nourish the mind of the child through the course of study which should comprise an orderly presentation of the whole field of knowledge in its elements, and to provide the opportunity for the exercise of all his powers, mental, moral, aesthetic, manual or constructive, through good instruction and wise discipline; (b) to guard and promote his normal physical development.

The special aim of secondary education and the teacher's greatest responsibility—a responsibility not often recognized or acknowledged hitherto—therefore consists in the discovery and the special development of each pupil's dominant interests, in so far as these interests represent possibilities of development in harmony with the general aim of education, and in the constant use of the course of study as a means of intelligent experimentation until the pupil's self-revelation is complete. During this stage, therefore, as the pupil advances, the relative educational values of the different subjects for each pupil correspond more and more to the relative degrees of interest they develop.

It is manifest that, in the application of this principle to practice, great care must be taken that caprice or chance interests do not dissipate the pupil's powers or narrow the whole range of his development. Flexible programmes with a wide range of electives are needed; but it must be remembered that the test of real interest can only be revealed by intensiveness and continuity in the pursuit of a subject during a sufficiently long period. What that period is, the judgment of the teacher must decide in each case. But the proper application of this principle will lead to that supremely desirable, although, at present, apparently unattainable result, that each man, while still a youth, will learn to know his powers and defects, and will be aided to select deliberately that calling for which he is best fitted by nature. Who can doubt that we should strive to attain it?

Hanus, Paul H., *Educational Aims and Educational Values* (New York, Macmillan, 1912), pp. 5, 17, 19, 20.

170

The Supreme Aim of Education

The supreme aim of education is *the nurture of the human spirit*. Other aims are valid just so far as they can harmonize with each other and with the acknowledgment of the single purpose here set down. . . . Reduced to such simple terms, this unified aim appears as just a redraft of what the wisest and greatest of men have said in countless forms of speech, ever since man ascended to some realization of himself. In matters of schooling these great educators have arrived at a like conclusion, although the channels of approach are diverse. Those, for example, who have influenced theory in our epoch: Arnold of Rugby and his contemporaries, Herbart, with his single aim fronting many-sided interests, Froebel, who familiarized English teachers with the antithesis of inner and outer, speak with no uncertain voice. Even John Dewey, who exercises so remarkable an influence on American education and appears as an unsparing critic of loose thinking and cheap sentiment, is seen, with all reserve, to be in the company of those who witness to the supremacy of the human spirit. When a sense of the infinite reach of an act physically occurring in a small point of space and occupying a petty instant of time, comes home to us, the meaning of a present act is seen to be vast, immeasurable, unthinkable. This ideal is not a goal to be attained. It is a significance to be felt and appreciated. It is the office of art and religion to evoke such appreciation and intimations; to enhance and steady them until they are wrought into the texture of our lives.

FINDLAY, JOSEPH J., *Foundations of Education* (New York, Holt, 1926), Vol. I, pp. 51-52.

171

Constituents of the Educational Ideal

We may conclude that the ultimate end of education is that of adjusting the young to the realities of life. Since those realities are with man largely established idealities, the utilitarianism of the school resolves itself to a considerable extent into a service of those aims which have constituted the academic motives of schoolmen. On the other hand, since no aim is permitted to remain in isolation, no knowledge, art, or moral practice will be suffered to survive in social heredity unless it proves its right to exist by its use, that is, by its service to other aims than itself. Thereby alone can its relative value be determined. The method of determining these relative values must be that of rationalizing human practice up to date. Perhaps, also, the school may be able to forecast new ideals of human nature, and by promoting their spread aid in the progress of humanity toward the realization of its potentialities for growth. At any rate, the educational institution is bound to lead the way in philosophic and scientific investigation in the progressive interpretation of the moral law, and eventually in the advance in artistic taste.

The constituents of the educational ideal include such fundamental conditions of self-preservation as health, vocational efficiency and conformity to the social order. These are factors of the simplest phase of utility. The educational aim concerns the service of the ideals of the reason, knowledge, artistic taste, virtue. These are the higher utilities, because in man's scale of valuation they are held as of greater worth. The highest utility is the service of self-realization, and in the control of this the school may be assigned a voice. But everywhere it must keep close to practice, to relative values, to the gospel of achievement. It must be on the alert to the verdict of practice upon its work. It must combine a wise conservatism with willingness ruthlessly to cut loose any form of culture the service of which has fallen below that which its presence excludes from the curriculum. Especially should the school cultivate the spirit of critical valuation or of utilitarianism among its pupils, for only through this can they achieve the highest service both for themselves and for the society in which they live.

HENDERSON, ERNEST N., *Principles of Education* (New York, Macmillan, 1916), p. 533.

172

Create a Consciousness of God

Education, as a whole, by means of instruction and training, should bring to man's consciousness, and render efficient in his life, the fact that man and nature proceed from God and are conditioned by him—that both have their being in God.

Froebel, Friedrich, *Education of Man* (New York, Appleton, 1887), p. 5.

173

Aim at a Sane Philosophy of Life

Our objective is to give the young people a "set" toward certain types of behavior. To secure that behavior we propose to depend chiefly upon a body of information that will explain the reasons for it. We are trying to teach the children what to believe and what to do in all the typical situations of their lives. In other words we are aiming at nothing less than a philosophy of individual and social life, that will guide them safely through the maze of modern civilization, and cause them to stabilize that civilization by their manner of living in it.

A philosophy of life! Pretentious as the term may sound, there can be no greater mistake than to suppose that a philosophy of life is only for adults. Instead, it is something that we all acquire during childhood. We of the older generation were taught it by our elders so early that for the most part the process has been forgotten. We got our beliefs from our mothers in their answers to the innumerable questions we asked them about everything that came to our attention. We got them from our Sunday school teachers and our pastors, and from our teachers and texts at school. We got them from our fathers' explanations of free silver, capital punishment, the folly of gambling, the secrets of animal breeding, and what not. We picked up beliefs from innumerable other sources. But long before we were fifteen years of age we had acquired a fairly complete philosophy of life. Some of us who have since become students have reconsidered and revised parts of it; but even the most scholarly of us are still unconsciously using, quite unrevised, large sections of that philosophy of individual and social life that we absorbed in childhood from such plebeian intellectual sources,—and sometimes vitiating our supposedly scientific conclusions with it.

FINNEY, ROSS LEE, *A Sociological Philosophy of Education* (New York, Macmillan, 1928), p. 288 ff.

174

Three Fundamental Aims of Secondary Education

Three important groups of activities require the participation of the individual and establish three fundamental aims for secondary education, as for all education, in America. Those three groups of activities are distinguished accordingly as they involve primarily: (1) participation in the duties of citizenship and in the not-directly economic relations of cooperative group life; (2) participation in the production and distribution of economic utilities; (3) the life of the individual as a relatively free and independent personality. Thus the three fundamental aims of secondary education are:

(1) The preparation of the individual as a prospective citizen and cooperating member of society—the Social-Civic Aim.

(2) The preparation of the individual as a prospective worker and producer—the Economic-Vocational Aim.

(3) The preparation of the individual for those activities which, while primarily involving individual action, the utilization of leisure, and the development of personality, are of great importance to society—the Individualistic-Avocational Aim.

INGLIS, ALEXANDER J., *Principles of Secondary Education* (Boston, Houghton Mifflin, 1918), pp. 366-367.

175

The Aims in the Light of History

What are the post-suppositions, as they might be called, of education, the things before the educational process, the ideals toward which the movement is directed? There are as many answers today as there have been ages of civilization in the past. Among those ideals for which different times and nations have stood and for which the modern educational world in various ways stands are to be enumerated the following: culture, efficiency, discipline, knowledge, development, character and citizenship.

Culture is the capacity for the intellectual and aesthetic enjoyment of leisure; it is a word particularly needed by modern overworked society.

Efficiency is the ability to do things quickly and well. It is an indispensable word in any system of universal education, and in all democratic, progressive, and free societies.

Discipline is sharpening the tools of consciousness. As a matter of fact, the best preparation for later living is right present living. For this reason the conception of discipline has a real, though greatly limited place in the educational ideal.

Knowledge is content of consciousness descriptive of fact. The preservation of old, and the pursuit of new, knowledge will ever remain a part of an inclusive educational ideal.

Development as an educational ideal means the realization of the capacities inherent in human nature. As development is the true mode of growth, it can never cease to be a portion of the educational ideal.

Character is the disposition of a person's will. The great common sense of mankind has always held that the head must not be educated at the expense of the heart. The feelings of worth attaching to the life devoted to righteousness demand that character form a permanent constituent of the educational ideal.

Citizenship is man's place in the state. As the state is one of the permanent institutions of society, and as man must ever live in organized relations with his fellows, citizenship cannot be omitted from the constituency of the educational ideal.

The organization of the educational ideal as one of the elements of the problem of education falls to the lot of the educational theorist. He will probably find that the educational ideal is no single one of the various historic ideals reviewed above, but is a synthesis of them all with due emphasis upon each. For the individual's sake, education must aim at culture, knowledge and development; for society's sake, it must aim at efficiency, character and citizenship. And when this is said it must quickly be added that the individual aims are also secondarily social, and the social aims are also secondarily individual.

HORNE, HERMAN HARRELL, *The Psychological Principles of Education* (New York, Macmillan, 1928), pp. 33-38.

176

Impression as a Phase of the Aim

By far the most important results of the impressions made certain by the school are the ideals, the viewpoints, the attitudes of mind, and the tendencies that directly further the details, which together constitute the various specific phases of the educational aim. Just what these details are, analysis of the various phases must determine. For example, it is highly essential to the furtherance of the aim that the form of self-activity now being discussed as *impression* should play its part in developing faith in divine providence, determined opposition to anything which menaces the public health, an earnest belief in the doctrine of equal rights as opposed to special privilege, or any other detail necessary to right living, good health, industrial efficiency, social service, good citizenship, and the proper employment of leisure. Conscious effort in the formal educational process to make impressions provoke interest in such details has of necessity been occasional and limited, in the absence of the analysis which alone can determine what details are necessary. At the worst, the cumulative force of impression is used against the school, or through force of external experience, in favor of activities that are conflicting with or hostile to its activities. On the one hand, dislike of teacher, lack of interest in studies, impatience of routine, reaction from purely academic existence, discomfort from unhealthful or unnatural environment—hourly, daily, week after week, month after month, and year after year; on the other, love of play, the joy of motor activity, the social companionship of chums or the "gang," the longing to make money, moving pictures, the theater, the lure of real life.

Sometimes the solution seems easy when the introduction of some one of the many possible sources of interest into the school makes the school interesting. It is a temptation, for example, to look upon manual training as a panacea, and to depend upon it to hold the motor and construction-loving boy to his task. The sympathetic teacher, vocational motive, school city, each often serves to remove a hostile condition within the school and at the same time to check antagonistic forces without. Such solutions are but partial, and substitute favorable and even, in the case of particular individuals, necessary conditions to success for the elements essential to the useful development of all. Pupils may love their teacher, their school, and their work, and students their college without gaining the permanent impressions fundamental in the realization of the aim to which teacher, school, and work are but conditions and means. Desirable as interest in the whole school environment is, it is better that it should be lacking than that it should be permitted to take the place of a constantly increasing attraction toward what is useful in life and antagonism for what is evil. When the learner, day by day and year by year, is consciously accumulating the impressions which directly and certainly make for respect for law and the equal rights of others, a love of justice, truth and honesty, devotion to all necessary work, interest in the common good, the useful feelings which, if persistently enough and effectively enough sought, will in the end dominate life and character, he will in most cases come to love the environment with which such teachings are associated.

Yocum, A. Duncan, *Culture, Discipline, and Democracy* (Philadelphia, Sower, 1913), pp. 37-39.

177

Education Is Training for the Work of After Life

According to my view, any one who would be good at anything must practise that thing from his youth upwards, both in sport and earnest, in its several branches: for example, he who is to be a good builder, should play at building children's houses; he who is to be a good husbandman, at tilling the ground; and those who have the care of their education should provide them when young with mimic tools. They should learn beforehand the knowledge which they will afterwards require for their art. For example, the future carpenter should learn to measure or apply the line in play; and the future warrior should learn riding or some other exercise, for amusement, and the teacher should endeavour to direct the children's inclinations and pleasures, by the help of amusements, to their final aim in life. The most important part of education is right training in the nursery. The soul of the child in his play should be guided to the love of that sort of excellence in which when he grows up to manhood he will have to be perfected. Do you agree with me thus far?

PLATO, *Laws* (translated by Jowett; London, Oxford University Press), Book I, 643.

178

The Ideal of Secondary Education

I think, therefore, that modern secondary education can and should be a refining, inspiring, unifying force in American life; it can and should offer the elements of general culture to all children and youth who are induced to seek general culture through the persuasive influence of a good beginning made in earlier education; or who, during the period from about twelve to eighteen or twenty years of age, become imbued with a desire for general culture from any cause whatever; it can and should inspire all children and youth who share in its opportunities with love and respect for all culture that promotes the progress and diffusion of truth, beauty, goodness, usefulness, or happiness; it can and should lead each pupil to self-revelation and self-development through the cultivation of his dominant interests and powers; and, on the basis of such revelation and cultivation, it can and should inspire, in rich and poor alike, a respect for work, in all its forms, and a permanent desire to engage in some vocation or worthy form of service when school life is past; it can and should be so administered that social segregations should not be promoted among children and youth, save on the basis of superiority in natural or acquired characteristics,—a superiority attested by constant superiority of achievements, of disposition, and of conduct; and it can and should arouse and persistently cultivate a desire to gain an insight into contemporary social problems—economic, political, educational—with a view to future intelligent and helpful participation in trying to shape wisely municipal, state, and national affairs.

The endeavor to realize this ideal of modern secondary education requires ardent devotion on the part of the teachers, and the intelligent and interested cooperation of the community.

Hanus, Paul H., *Educational Aims and Educational Values* (New York, Macmillan, 1912), pp. 137-138.

179

The Essence of Education

We can be content with no less than the old summary of educational ideal which has been current at any time from the dawn of our civilization. The essence of education is that it be religious.

Pray, what is religious education?

A religious education is an education which inculcates duty and reverence. Duty arises from our potential control over the course of events. Where attainable knowledge could have changed the issue, ignorance has the guilt of vice. And the foundation of reverence is this perception, that the present holds within itself the complete sum of existence, backwards and forwards, that whole amplitude of time, which is eternity.

Whitehead, Alfred North, *The Aims of Education* (New York, Macmillan, 1929), p. 23.

180

Moral Character as the Aim of Education

This aim of education stands upon a different basis from that just considered. It is certainly more definite to speak of the development of moral character than to speak of the harmonious development of an individual's capacities. Here, then, we have a possible ultimate principle; if the capacities of the individual are to be developed in harmony with a recognized standard of morality, then we at least have something tangible upon which to build. Having this standard definitely in mind, we can select the experiences that will most effectively accomplish our purpose. The difficulty lies in the fact that not all men agree as to what constitutes morality. Morality is a name; a definite meaning must be attached to the word before we can accept it as an ultimate principle.

Of those whose names are prominent in the philosophy of education, Aristotle and Herbart have, perhaps, most consistently argued for moral development as the end of education. Aristotle finds in man two tendencies; the one passionate and brutal, the other intellectual and human. The latter, he maintains, is the basis of morality and to develop it is the work of education. Thus morality, gained in part through education, is the conquest of brute passions, animal impulses, by what we may designate as intelligence. In the natural man, pleasures of the intellect. The moral life becomes, then, a "golden mean" in which the material is governed by, but not sacrificed to, the ideal.

Herbart looks upon education and morality in a similar light. "The true and whole work of education," he says, "may be summed up in the concept—morality." The most important characteristic of Herbart's conception of morality is the "good will." This he explains in the following words: "The good will is the steady resolution of a man to consider himself as an individual under the law which is universally binding. . . . If we think of the power, and resistance as well, with which a human being maintains this good will erect in himself against those movements of the emotions and desires working in opposition to it, then morality . . . becomes to us the virtue, power, action, and efficacy of the will so determined." Or, to put this clumsy and obscure proposition in another way, morality consists in the dominance of the lower and more primitive impulses (movements of the emotions and desires) by higher ideas; a point of view, it will be seen, quite similar to that of Aristotle.

This bold statement of the dependence of morality upon experience is Herbart's lasting contribution to the theory of education. It is only another way of saying that the child is not born a moral being, but attains to morality only after a long and tedious process of training—a process that is justly termed education.

Bagley, William C., *The Educative Process* (New York, Macmillan, 1928), pp. 55-57.

181

The Main Purpose of Education

The undiscerning and the thoughtless are divided into two great groups, the one the conventional crowd which simply passes on the past without change, the other the red mob, the devotees of the next easiest and cheapest philosophy, "the philosophy of knock." The unthinking join each of these two groups in crowds. But the man of education and intelligence in general joins neither. Indeed, is not the main purpose of education to enable one to know the truth of the present, and to understand the truth of the past; in a word, to enable one to estimate correctly his own place and that of his contemporaries in the ever-expanding ocean of knowledge, for only with such understanding can he shake off the inhibitions of the conventional, free himself from the emotional futility of the radical, and put forth constructive effort for the real betterment of the world?

Millikan, Robert, *Evolution in Science and Religion* (New Haven, Yale University Press, 1929), pp. 56-57.

CHAPTER VIII

The Individual and Society

THE purpose of this chapter is to consider the individual and society as related to each other and to education. The chapter opens with a statement from William T. Harris, in his time the leading Hegelian scholar in the English-speaking world, and one of the greatest educational philosophers America has produced. The student should read this extract carefully and note especially the distinction drawn between material things and things of the mind. Blackmar and Gillin make a clear statement on the dependence of the individual (183). From Horne we have a historical survey of the recognition of the individual, a part of which is quoted (187). A good statement on the relation between the individual and the social environment is the one by James (188). Attention should be given to selections 190, 192, 201, 206, 212, and especially to 215, 216, and 217.

182

The Psychology of Social Science

Human society is founded on the deep mystery of vicarious atonement which is announced in the creeds of Christendom. The social whole suffers for the first cost of its experience, dividing up the pain among the myriads of human beings who contribute this experience. But it delivers its entire lesson to each new person who comes into the world without the necessity of his living over again the life of toil and pain which has furnished the lesson. The race thus lives vicariously for the individual, and it is this vicarious living of all for each and of each for all, made possible by the institutions which form the network of society, that makes human nature divine.

Man is not only an animal having bodily wants of food, clothing, and shelter, but he is a spiritual being existing in opposition to Nature. Man, as a child or a savage, is an incarnate contradiction; his real being is the opposite of his ideal being. His actual condition does not conform to his true nature. His true human nature is Reason; his actual condition is irrational, for it is constrained from without, chained by brute necessity, and lashed by the scourges of appetite and passion. Thus there is a paradoxical contrast between Nature and human nature; between Nature as spread out in time and space—existing in mineral, vegetable, and animal—and human nature, or realized reason. Nature in time and space consists of beings limited by each other, and not of self-limited beings. Thus fate everywhere prevails in Nature, and each natural thing is constrained by its circumstances, and can not change itself, can not realize an ideal of its own—in fact, has no ideal and is no self. Man, as he begins his career, is such a natural being. His human nature is then only a possibility to him. Human nature must be made by the activity of man in order to exist.

As man ascends out of Nature in time and space into human nature, he ascends into a realm of his own creation, and therefore into a realm of freedom. The world of material nature is not self-limited. The chief attribute of matter is exclusiveness. Impenetrability is an essential quality of it. Two bodies can not occupy the same place, nor can one body occupy two places. Hence the material necessities of life—food, clothing, and shelter—are essentially brute necessities, having selfishness or exclusiveness as their basis. The food, clothing, or shelter appropriated by one human being can not be likewise appropriated by another at the same time. If participation exists in regard to material supplies, it exists through division and diminution of shares. But it is the opposite of this in spiritual things, in things of the mind. Spiritual blessings always increase by being shared. In fact, they do not exist except in and through participation. It is through combination of man with man that the individual is able to achieve a rational existence. By combination each one is able to participate in the life of every other, forming a vast organism of institutions called human society, wherein each helps all and all help each.

Harris, William T., *Psychologic Foundations of Education* (New York, Appleton, 1898), pp. 255-257.

183

Dependence of the Individual

How dependent is the individual upon others, in spite of the fact that he often assumes that he can do as he pleases. He feels that his will is free to choose his course. So strong is this feeling of self-sufficiency that in moments when it most completely masters him he acts with a total disregard of the facts of his material environment and of the thoughts and feelings of his fellows. If physical material is in his way, he has but to remove it, his success being measured by his power to do so. If his fellows attempt to thwart his plans, he has but to thrust them aside and his purpose is accomplished. This ever present, persistent, self-assertive ego of man is constantly reminding him that he alone is to be consulted about his course of action. He considers, "Shall I do this or shall I do that?" or "I will do this," or "This is the most profitable for me," just as if he had the final settlement of the affairs of life which concern him. Yet the fact is that in the complex social life of our day his actions—indeed, even his thoughts and feelings—are influenced in large measure by a social life which surrounds him like an atmosphere. This conquering bent of man's nature, developed through long-continued race habits of conquest over the material world, the world of savage beasts and of more savage men, deceives man by making him believe at times what is only partly true. It is true to a degree that man can bend things to his will. Human achievement is marked by his ability to do so to a more remarkable degree than any other animal. However, the converse is also true, that no man really acts independently of the influences of his fellow men. Everywhere there is a social life setting limitations and predominatingly influencing individual action. In government, in religion, in industry, in education, in family association—in everything that builds up modern life, men are cooperating. They work together, combine, and organize for specific purposes, so that no man lives to himself. It is this unity of effort that makes society.

Blackmar, Frank W., and Gillin, John L., *Outlines of Sociology* (New York, Macmillan, 1917), pp. 3-4.

184

Individual Repression and Freedom

One of the most general philosophic notions to be used in the analysis of civilized activities is to consider the effect on social life due to the variations of emphasis between Individual Absoluteness and Individual Relativity. Here "absoluteness" means the notion of release from essential dependence on other members of the community in respect to modes of activity, while "relativity" means the converse fact of essential relatedness. In one of their particularizations these ideas appear in the antagonism between notions of freedom and of social organization. In another they appear in the relative importance to be ascribed to the welfare of the state and to the welfare of its individual members. The character of each epoch as to its social institutions, its jurisprudence, its notion of ideal ends within the range of practicability, depends largely upon those various patches of activity within which one or the other of these notions, individual absoluteness or individual relativity, is dominant for that epoch. No period is wholly controlled by either one of these extremes, reigning through its whole range of activities. Repression in one direction is balanced by freedom in others.

Whitehead, Alfred North, *Adventures of Ideas* (New York, Macmillan, 1933), pp. 54-55.

185

The Social Milieu and Personal Experience

The greater part of each man's personal experience is made up out of his interaction with others in the multifarious relations of life, and these relations, from the earliest known phases of human society, are controlled by customs which arise out of the needs of social life and are maintained by the social tradition. Through this tradition society exerts a continuous control over the individual, of which avowed and obvious coercion is the least important element. The vital factor is that from infancy upwards the social milieu into which he is born interpenetrates his thought and will, and turns his individuality into a creation of the time and place of his life.

Hobhouse, Leonard T., *Social Evolution* (New York, Columbia University Press, 1911), p. 66.

186

The Individual and Society Organically Related

If we accept the evolutionary point of view we are led to see the relation between society and the individual as an organic relation. That is, we see that the individual is not separable from the human whole, but a living member of it, deriving his life from the whole through social and hereditary transmission as truly as if men were literally one body. He cannot cut himself off; the strands of heredity and education are woven into all his being. And, on the other hand, the social whole is in some degree dependent upon each individual, because each contributes something to the common life that no one else can contribute. Thus we have, in a broad sense of the word, an "organism" or living whole made up of differentiated members, each of which has a special function.

Cooley, Charles Horton, *Human Nature and the Social Order* (Revised Edition; New York, Scribner, 1922), p. 35.

187

Historical Survey of the Recognition of the Individual

The history of civilization and of its mirror, education, shows a constant conflict between the interests of society, the big individual, and of its members, the small individuals. Theoretically, there should be no such conflict; the best society is highly individualized, and the best individual is highly socialized. But this theoretical ideal is itself the product of centuries of practical and sometimes groping travail. The realization of this ideal is the true goal of individual and social human development. Meanwhile human history shows a very painful and slow progress toward this happy, nay, blessed, state. In some cases the social interests have crushed individuality; in other cases individual interests have shattered old social values.

The course of the progress in general has been from the social, to the individual, to some reconciliation of the two. Then after a lapse of time, through the reentrenchment of the social, the same dialectic again, with perhaps a better reconciliation. And then, the same again and again. The histories of individual nations show repeatedly this movement from arbitrary power, to revolution, to a temporary harmony. The history of universal mankind shows the same immanent dialectic, from absolutism, to successful rebellion which is revolution, to democracy, or the synthesis of the universal and individual wills. This formula is indeed abstract and schematic; it may remind one of the Hegelian thesis, antithesis and synthesis; it certainly does not do full justice to the concrete facts involved in this social-individual phase of the human movement; and other formulations are without doubt possible. I think there is no single cipher to the mystery of human evolution. . . .

In Greece, the interest of the city-states dominated individuality. Sparta is the best illustration. But the city-states were smaller than the vast Oriental empires, and, though there were many slaves, there were also some freemen. Under

Pericles for a short while the social and individual interests were so well harmonized that his Athens represents the first of the several historic approaches to the coming golden age of man. The rise of the Sophists in Greece is the first illustration, after centuries of Oriental universalism, of extreme individualism. Theoretically, Socrates, Plato, and Aristotle adjusted in their teachings the social and individual interests, giving the world ideal models of the solution of the problem; practically, Greek national life went to wreck on the rock of individualism and fell an easy prey, first, to the conquering Alexander, then to the Roman eagles. Greece is the transition from Oriental absolutism to Western individualism; in Greece, in the tragedies of Aeschylus, Sophocles, and Euripides, fate is still the power behind the throne of Zeus; yet in Aristotle's Ethics man is assigned power over his deeds; the elements of the problem of fate and freedom were at last juxtaposed. In Aeschylus, Zeus himself "may not avoid what is destined," and Sophocles makes the Chorus in "Antigone" say, "Pray no more now. From his appointed woe man cannot fly." In contrast with these views of gods and men as effects of fate, Aristotle presents us with the view of man as himself a cause, saying, in the third book of his Ethics, "Man, then, as has been said, appears to be the efficient cause of his actions." . . .

In Rome the social interests again, in the form of the state-consciousness, dominate the individual. Rome did not produce as great individuals as Greece, but she produced a greater state. . . . On the whole in republican Rome the welfare of the individual was merged in the public good. The presence of centralized power caused Rome to rise; the absence of moralized individuality caused Rome to fall.

HORNE, HERMAN HARRELL, *Idealism in Education* (New York, Macmillan, 1910), pp. 97, 98, 101, 102, 103.

188

Social Evolution a Resultant of Two Factors

The relation of the invisible environment to the great man is in the main exactly what it is to the "variations" in the Darwinian philosophy. It chiefly adopts or rejects, preserves or destroys, in short, selects him. And wherever it adopts and preserves the great man, it becomes modified by his influence in an entirely original and peculiar way . . . the great man, whether he be an importation from without like Clive in India or Agassiz here, or whether he spring from the soil like Mohamet or Franklin, brings about a rearrangement, on a large or a small scale, of the preexisting relation. . . .

Social evolution is a resultant of the interaction of two wholly distinct factors,—the individual, deriving his peculiar gifts from the play of physiological and infra-social forces, but bearing all the power of initiative and origination in his hands; and second, the social environment, with its power of adopting or rejecting both him and his gifts. Both factors are essential to change. The community stagnates without the impulse of the individual. The impulse dies away without the sympathy of the community.

James, William, *The Will to Believe* (New York, Longmans, 1921), pp. 226, 232.

189

Schools Are Socializing Institutions

In the main we may say that the pedagogical institutions of society are socializing and collectivistic. They aim to preserve the type of "socius," or citizen, that the system of things requires. This necessitates the development of the individual along lines that reduce his eccentricity and train his powers into conformity to the standards of social usage and common life. It is still true that in so doing the ends of the individual attainment and progress are not lost; for it is from the platforms of social attainment and appreciation that the thoughts of the genius, the plans of the inventor, and the schemes of the reformer are projected for the enlightenment and improvement of mankind.

Baldwin, James Mark, *The Individual and Society* (Boston, Gorham, 1911), p. 127.

190

Human Progress Demands a Justifiable Individualism

The social system because of its imperfection has a tendency to suppress individual effort and to reduce each to a status of slavery. We are bound to the wheel of its social car. The remedy for this is not in abolishing the social system, not in the substitution of a system that may be marked according to formula; but in the development of the individual with opportunity for a larger service and an increased responsibility. What is needed is a regenerated individual, one that seeks survival through service to others, one whose personality has been moulded through an intelligent, a socialized education of his distinctive traits and capacities. Call it personality or individuality; it is the temper, the tone, the very essence of social life. A system of politics or religion, or social order that fails to recognize this is doomed to failure. The world needs not fewer benevolent enterprises, not fewer beneficent laws, not fewer group activities but better utilization of all these and more, through the development of an intelligent and unselfish individualism. Human progress demands that we depend on a justifiable individualism that seeks the fullness of life in devotion to the common good.

Horne, Herman Harrell, *Free Will and Human Responsibility* (New York, Macmillan, 1912), pp. 141-142.

191

Social Participation Humanizes the Individual

As a mere individual, isolated from the community, man cannot ascend above savagery. What small portion of the earth and heavens a mere individual can apprehend with his unaided five senses is only sufficient to bewilder him with problems. He cannot attain any solution of them. It is only when man comes to avail himself of the aggregate observations of mankind that he is placed in a position to get an inventory of the world of some value. . . . By participation the individual is able to re-enforce himself with the sense-perceptions of all, the thought and reflections of all, the life experience of all.

Harris, William T., *Psychological Foundations of Education* (New York, Appleton, 1901), pp. 254-255.

192

Anarchism versus Socialism

It is characteristic of minds ignorant of history to propose solutions of modern questions in terms of either extreme. The anarchists, for example, are extreme individualists. The Socialists are, as their name implies, at the opposite extreme. To the anarchist the government is nothing and the individual is everything; to the Socialist, the individual is nothing and the government is everything. To the historic type of thinker, government and individuality are two extremes of one reality; true government must express individuality, and true individuality must embody the laws of the government. Modern industrial conflicts between labor and capital are really illustrations of the effort of the two principles of the individual and the organization to live together. Trade unionism is the effort to preserve individuality by organization. The social turmoil of our times, so confusing to the casual observer, is really the effect of the efforts of adjustment between the forces that make and crush individuality. The solution will be neither anarchistic nor socialistic, but humane, and in the broadest sense, Christian.

Horne, Herman Harrell, *Idealism in Education* (New York, Macmillan, 1910), pp. 110-111.

193

The Individual and Society Are Two Aspects of Life

The individual and society are but the two aspects of one great unitary fact. This fact is life and life is not a thing but a process. The life-process may be viewed from either one of its two aspects, the individual or the social. Society supplies the medium in which the individual develops.

BETTS, GEORGE H., *Social Principles of Education* (New York, Scribner, 1913), p. 13.

194

Pledge of the 4-H Club

I pledge my head to clearer thinking, my heart to greater loyalty, my hands to larger service, and my health to better living—for my club, my community, and my country.

Journal of the N.E.A., February 1928, p. 52.

195

Preserve the Family

And so this chapter would close with a plea that parents and teachers bend their efforts to secure sounder knowledge, truer idealism, a firmer self-control for the young men and women of our land who are to be the husbands and wives, the fathers and mothers of the coming generation. Only thus can we get at the root of the disease that is sapping the vigor of married life; only thus can we combat the tendencies that are making still further for the disintegration of the family. And when we recall what this institution has accomplished for the good of the social body in the past, we may well put forth our best efforts to preserve it. For what substitute for the monogamic family as the nursery of individuality has society yet evolved? What other form of organization so completely secures the proper maintenance and training of the young? What other type of sex relationship has done so much to nourish the more spiritual phases of sex passion? In an age of domestic unrest every thoughtful man and woman should inform himself or herself on questions concerned with the family institution and exercise such influence as he or she may possess to deepen the respect in which it is held by the public in general, as well as to bring about needed reforms in its operation.

GOODSELL, WILLYSTINE, *A History of the Family As a Social and Educational Institution* (New York, Macmillan, 1920), p. 550.

196

Imagination in Social Life

If I were asked to state in two words the mark of a socially valuable "self" I should say without hesitation efficient imagination. For without imagination we can have no broad and abiding sympathy; without it we are mere clansmen or tribesmen, or narrow members of a guild, trades-union or profession. . . .

For if we once grasp the idea that society is simply the aggregate of our images of each other, it is easy to see that imagination is the prerequisite not only to social reform, to that ideal of society we dream of, but also to any sort of societal life at all. Indeed for my fellows to exist in the slightest degree for me as social beings they must be visualized; and no form of social control is possible without this constant imagining of one's fellows and their presence. But this is merely to reduce my own sense of myself as a social person to the same terms, for, as we have repeatedly observed, I get myself only by observing others and by comparing these observations of ego and alter in my imagination. It is not too much to say, then, that a man is just so much of a man as his sympathies are wide.

TODD, ARTHUR J., *Theories of Social Progress* (New York, Macmillan, 1918), pp. 60, 62.

197

Progress Starts and Ends with the Individual

All progress starts with and ends with the individual being. He is the material out of which the superstructure of civilization is reared. This little human dynamo is the source of the power in which the world takes pride. While our education, our religion, our social reform have become mass plays, it should be understood that political, religious, or social organizations will not in themselves redeem the human mind from error nor establish happiness among mankind. The whole cannot be redeemed by formula; men may not be educated or reformed in phalanxes. . . .

Biologically, man was an individual before he was a social being. He did not appear as a swarm, but as an individual. . . . Variations are the raw material for his development. This variation is shown in the individual differences of the most closely related groups in the same family, even in twins born of the same parents, and starting from the same germ cell. It is fatal to ignore these individual differences which the countless generations have not overcome, and which neither education nor association can obliterate. Human association through group activity may furnish means of nutrition and growth, yea, means of preservation, only to accentuate the individual characters. In the germ plasm of the individuals are the factors that determine the physical and mental traits of the offspring. This is not a social function. No rule of action of the group, no wise laws, no social co-operation can change this fundamental law. By social action nature may be given a better chance, and that is all.

Blackmar, Frank Wilson, *Justifiable Individualism* (New York, Crowell, 1922), pp. 11, 56.

198

The Law of the Moral Life

Man has social or other-regarding, as well as individual or self-regarding, impulses and instincts. By nature and even in his unmoralized condition, he is a social being. But his sympathetic nature must, equally with the selfish and egoistic, be forced and moulded into the virtuous character; the primary feeling for others, like the primary feeling for self, is only the raw material of the moral life. And the law of process of moralization is the same in both cases; the dutiful attitude towards others is essentially the same as towards ourselves. For in others, as in ourselves, we are called upon to recognize the attributes of personality. They, too, are ends in themselves; their life, like our own, is one of self-realization, of self-development through self-discipline. We must treat them therefore, as we treat ourselves, as persons.

The law of the individual life is also the law of social life, though in a different and wider application. Virtue is fundamentally and always personal; and when we have discovered the law of the individual life, we have already discovered that of the social life. Since men are not mere individuals, but bearers of a common personality, the development in the individual of his true selfhood means his emancipation from the limitations of individuality, and the path to self-realization is through service of others. Not that we serve others, the better to serve ourselves: we ought not to regard another person as the instrument even of our highest self-development. They too are ends in themselves: to them is set the self-same task of self-realization. The law of the moral life, the law of personality, covers the sphere of social as well as individual duty; and that law is: "So act as to treat humanity, whether in thine own person or in the person of another, always as an end, never as a means to an end."

SETH, JAMES, *A Study of Ethical Principles* (New York, Scribner, 1902), pp. 275-276.

199

The Law of the Jungle

Now this is the Law of the Jungle—as old and as true as the sky;
And the Wolf that shall keep it may prosper, but the Wolf that shall break it must die.
As the creeper that girdles the tree-trunk the Law runneth forward and back—
For the strength of the Pack is the Wolf, and the strength of the Wolf is the Pack.

KIPLING, RUDYARD, *The Second Jungle Book* (New York, Doubleday, 1922), p. 29.

200

Personality in Social Life

In primitive society membership is intimate and inclusive, the individual putting his whole personality into it. But as groups become numerous and complex there comes to be a kind of parcelling out of personal activities into somewhat impersonal functions, with special associates in each function. A person, while as much dependent as ever upon the group system as a whole, grows less and less identified with any one group. His relations become selective, each man working out for himself a system of life different from that of any other man, and not embraced in any one set of connections. Personality becomes more and more an organization by itself, distinct from that of any group, and forming itself by a special choice of influences. You cannot sum up the social environment and mental outlook of a man today by saying that he is a farmer or artisan or priest, as you might have done in the Middle Ages. He may be a farmer and also many other things; a member of learned societies, an investor in remote enterprises, a socialist, a poet; in short, a complex and unique personality.

We are coming more and more to base our social order upon this selective association. In accordance with the ideal of "equal opportunity," we try to facilitate special personal development in every possible way, holding that it not only does the most for the individual, but enables him to do the most for society. In this way modern society recognizes and fosters individuality, as the earlier epochs never thought of doing.

COOLEY, CHARLES HORTON, *Social Process* (New York, Scribner, 1918), p. 249.

201

Progress the Result of Self-Sacrifice

We find man making continual progress upwards, progress which it is almost beyond the power of the imagination to grasp. From being a competitor of the brutes he has reached a point of development at which he cannot set any limits to the possibilities of further progress, and at which he is evidently marching onwards to a high destiny. He has made this advance under the sternest conditions, involving in the average—as the price of continual resistance to the law of retrogression—a constant state of rivalry, effort, and self-sacrifice and the failure and suffering of great numbers. His reason has been, and necessarily continues to be, a leading factor in his development; yet, granting, as we apparently must grant, the possibility of the reversal of the conditions from which his progress results, these conditions can never have any universal sanction from his reason. They have had no such sanction at any stage of his history, and they continue to be as much without such sanction in the highest civilizations of the present day as at any past period.

KIDD, BENJAMIN, *Social Evolution* (New York, Macmillan, 1894), p. 83.

202

The Quality of a Community Is the Quality of Its Social Units

Community is the common life of persons, and its vitality depends on the individuality and sociality of these persons. These are the tests of all community, not one alone, but both together. For as each of us makes his society, so does our society make each of us. Our individuality, if it is strong, goes out to strengthen—if it is weak, to weaken—our society; and to our society we owe in turn the measure of our individuality. The opposition of sociality and individuality is accidental, in essentials they develop out of one another; and as true society seeks to develop individuality, so the most gifted individuality finds its expression and fulfillment in society. The more the members of a community enter into the life of that community, the richer by the amount of what they themselves have brought becomes their life. Its quality is the quality of the social units whose common life it is—if the fuel is poor, how can the flame be bright? Its intensity is the degree in which these members are united in that common life.

MacIver, Robert M., *Community* (New York, Macmillan, 1917), p. 221.

203

Other-Regarding and Self-Regarding Tendencies

Every observer of children is aware of certain instinctively social or other-regarding tendencies in them. Apparently opposite to these are a variety of self-regarding tendencies no less potent. Nature has indeed provided that man shall desire to mingle, to cooperate, and to grow with others; but no less it seems to have been solicitous that he shall desire to be by himself and to grow strong in himself.

Both sets of tendencies are obviously normal, and either may certainly be carried to excess. All social philosophers would agree that individuality should be cultivated, and that excessive individualism is bad. Of course, we all know of individuals who are so greedy, self-centered, egotistical or anti-social that they do their fellows more harm than they do themselves good—who are, therefore, bad members of society. We also know persons who are so self-abnegating, submissive and pliant that they do themselves more harm than they do good to others,—they also are, at best, poor sticks in the social structure. The strongly self-willed no less than the weak-willed represent virtue in excess.

Snedden, David S., *Educational Sociology* (New York, Century, 1924), p. 183.

204

Civilization a Contest Between Individualism and Centralization

Thus in the history of civilization there has been a parallel growth of two opposite principles. One is the growth of society resulting from centralization; the other is the increasing value set upon the individual.

Society has constantly tried to make man its slave. The individual, on the other hand, has no less constantly been trying to exert his own personality, trying to raise himself above the condition of slavery, trying to lift himself out of poverty, trying to obtain his share of the good things of the world. . . .

Civilization could not have developed unless the individual had been advanced, nor could it have developed unless centralization had made possible a constantly widening organization.

The triumph of individualism would have been barbarism; the triumph of the centralization would have been stagnation; the contest of the two has produced civilization.

Conn, Herbert W., *Social Heredity and Social Evolution* (New York, Abingdon, 1914), pp. 188, 195.

205

Individual Activities Constitute Social Reality

The individual activity is one instance of the prevalent activity and is itself known to associates and is socially caused. If we could take a great social reality and pull it out, as one does a telescope, to show its parts, those parts would be seen to be individual activities. Or to use a better figure, as when we put a piece of animal or vegetable tissue under a powerful microscope we see that it is composed of individual cells, so when we look at a social reality closely enough, so to speak, microscopically, so as to discover its histology, we perceive that it is composed of individual activities. Each cell in a tissue is a living individual but it could not live except as a part of the tissue nor could the tissue live except in the life of the cells. So a social reality, however great, is made up of individual activities so interrelated as to compose it; at the same time the individual activities can exist only as social realities. As cells can be adequately understood only as composed of cells, so also the individual activities can be adequately understood only as items in social realities and social realities can be adequately understood only as composed of individual activities. Individual and social activities are identical in the same sense that cells and tissue are identical.

HAYES, EDWARD C., *Introduction to the Study of Sociology* (New York, Appleton, 1926), p. 500.

206

Liberty Under Law

We have come to understand, again following the seed-thought of the Greeks, that the true line of institutional progress lies between the two extremes; that that conception of our institutional life is the true one which regards each of us as entitled to liberty but in subordination to law. We have come to regard this as a last lesson of a political philosophy that is based upon a study of human history and of human nature. The conception of liberty under the law, allowing a field for every human activity to develop and enrich itself without pulling down its fellow, all co-operating toward a common end, typifies and explains, better than any extreme theory of philosopher or sciolist, the institutional life of the race. . . . The institutional life that carried with it lessons of duty, responsibility, and the necessity for co-operation in the working out of high ideals, as well as appreciation of men's collective responsibilities, is now being put before children wherever sound education is given, from the kindergarten to the university.

BUTLER, NICHOLAS MURRAY, *The Meaning of Education* (New York, Scribner, 1915), pp. 33-35.

207

The Principle of Balance

In the piloting of society no valuable element should have either too little influence or too much influence. When a ganglion of gray matter is not left free to do well its proper work or when it cannot get a fair hearing for its good ideas and hence is not making to the intelligent guidance of the whole that contribution which it is capable of making, it has too little influence. When, on the other hand, it is so ascendent as to make all the rest the victim of its special psychology, it has too much influence. Thus we arrive at the principle of balance, which may be stated as follows: In the guidance of society each social element should share according to the intelligence and public spirit of its members and none should dominate.

Ross, Edward Alsworth, *Principles of Sociology* (New York, Century, 1924), p. 692.

208

The Individual and the Social Whole an Organic Unity

Indeed the relation of the individual to the social whole which envelops him and penetrates him is comparable with the relation of mind and body in respect of organic unity, though we must always be careful to remember that it is a relation between spiritual terms. It is a unity within the miracle of experience, for that is what real adjustment means. And we must put the problem of the schools in this way. It is to extricate the objective element, the social world, in this side of experience, to unfold it to view, and to extend it as far back as possible so that its continuity through history is realized, and as far outward as possible until its continuity through existing humanity is felt as a reality.

Adamson, John E., *The Individual and the Environment* (New York, Longmans, 1921), p. 220.

209

The Soundest Educational Philosophy

This change has been made, and as the century closes, the soundest educational philosophy the world over teaches that the individual alone is nothing, but that the individual as a member of society and of a race is everything. Selfhood, which can only be attained by entering into the life history and the experience of the race, is now put in the high place which was about to be rashly filled by selfishness. True individualism, which would enrich the life of each with the possession of all, is well-nigh supreme, and sham individualism, which would set every man's hand against his fellows, is disposed of, let us hope, forever.

Butler, Nicholas Murray, *The Meaning of Education* (New York, Scribner, 1915), p. 312.

210

In Society the Whole Can Not Be Deduced from the Sum of Its Parts

Any given society has properties of its own which cannot be deduced from those properties of the individual which are common to men in all social states, for those properties may, as we have seen, remain constant when the social organization varies. The inference from the part to the whole would be as impossible as the inference to the properties of any given animal from the tissues which it possesses in common with other animals.

Stephen, Sir Leslie, *The Science of Ethics* (New York, Putnam, 1907), p. 111.

211

The Chief End of Education

The chief end of education is to subjugate and sublimate for the collective purposes of our kind the savage egotism we inherit. Every school, every college teaches directly, and still more by implication, relationship to a community, and devotion to a community.

Wells, H. G., *The Salvaging of Civilization* (New York, Macmillan, 1921), p. 26.

212

The Businessman and Human Betterment

This deserves a whole chapter. When you put your employees under conditions where only the rough and strong can survive, when you put women into steaming, filthy rooms where the high-strung, delicate, refined and beautiful among them are wrecked, when you permit or produce economic conditions which force women to labor on farms or in factories where the toil is too hard for their womanhood to bear, you are wrecking all the hopes for a better community. Only the broad-hipped, broad-backed, stout-legged, thick-necked, flat-breasted, big-shouldered ugly women of low mentality and spirit can stand that sort of thing. The lovely and delicate, the beautiful and refined, are killed by such pressure. Not only that, men in time come to admire women who can endure such life and bear them children. The result is the gradual production of an ugly, stupid working people out of whom all life and beauty have been crushed and selected away from the stream of heredity.

Every effort by business men to improve economic conditions has a far-reaching influence upon racial health and stamina. The ambition of business men should be to bring about such economic and social conditions that many, many women could live the protected life of the home and so give their time and high capacities to the central problem of all nations, the proper rearing of children. And, where women are compelled to work, it should be under conditions that will preserve their physical loveliness and mental poise and spirit. Business men should also see to it that their men and women employees have a decent and happy social life which permits wide and wholesome acquaintanceship among them, with a view to having in each individual case numerous marriage choices. Business men can be, indeed always have been, a very large factor in setting up those social and economic conditions which select a race up or down, and in this age their opportunities and responsibilities do not end with the cash box, but extend out into all the higher interests of the race.

Wiggam, Albert Edward, *The Fruit of the Family Tree* (Indianapolis, Bobbs-Merrill, 1924), pp. 361-362.

213

The Meaning of Utilitarian Morality

I must again repeat, what the assailants of utilitarianism seldom have the justice to acknowledge, that the happiness which forms the utilitarian standard of what is right in conduct, is not the agent's own happiness, but that of all concerned. As between his own happiness and that of others, utilitarianism requires him to be as strictly impartial as a disinterested and benevolent spectator. In the golden rule of Jesus of Nazareth, we read the complete spirit of the ethics of utility. To do as you would be done by, and to love your neighbour as yourself, constitute the ideal perfection of utilitarian morality. As the means of making the nearest approach to this ideal, utility would enjoin, first, that laws and social arrangements should place the happiness, or (as speaking practically it may be called) the interest, of every individual, as nearly as possible in harmony with the interest of the whole; and secondly, that education and opinion, which have so vast a power over human character, should so use that power as to establish in the mind of every individual an indissoluble association between his own happiness and the practice of such modes of conduct, negative and positive, as regard for the universal happiness prescribes; so that not only he may be unable to conceive the possibility of happiness to himself, consistently with conduct opposed to the general good, but also that a direct impulse to promote the general good may be in every individual one of the habitual motives of action, and the sentiments connected therewith may fill a large and prominent place in every human being's sentient existence. If the impugners of the utilitarian morality represented it to their own minds in this its true character, I know not what recommendation possessed by any other morality they could possibly affirm to be wanting to it; what more beautiful or more exalted developments of human nature any other ethical system can be supposed to foster, or what springs of action, not accessible to the utilitarian, such systems rely on for giving effect to their mandates.

Mill, John Stuart, *Utilitarianism* (Everyman's Library Edition; New York, Dutton, 1910), p. 16.

214

Socializing the Individual and Individualizing Society

But we need to recognize that education is the individualizing of society as well as the socializing of the individual. The individualizing of society makes men efficient, as the socializing of the individual makes men good. The individualizing of society makes leaders of society, as the socializing of the individual makes fit members of society. To adjust the individual to society is a stabilizing process, tending to preserve the ancient social institutions; to adjust society to the efficient leader is a process making for progress, tending to increase the social values. For education simply to adjust men to society would be indeed valuable conservation, but for education also to adjust society to the capable individual means progress. It is the business of education to make capable leaders as well as good followers, to make the will efficient as well as right. It is the leaders of the race who have set the pace of progress,—Socrates, Jesus, Paul, Savonarola, Luther.

Horne, Herman Harrell, *Idealism in Education* (New York, Macmillan, 1910), pp. 126-127.

215

Mankind Shifting Its Outlook

Mankind is now in one of its rare moods of shifting its outlook. The mere compulsion of tradition has lost its force. It is our business—philosophers, students, and practical men

—to re-create and re-enact a vision of the world, including those elements of reverence and order without which society lapses into riot, and penetrated through and through with unflinching rationality. Such a vision is the knowledge which Plato identified with virtue. Epochs for which, within the limits of their development, this vision has been widespread are the epochs unfading in the memory of mankind.

WHITEHEAD, ALFRED NORTH, *Adventures of Ideas* (New York, Macmillan, 1933), pp. 125-126.

216

The Central Problem in Education

Educators must recognize the importance of affording latitude to the individual without losing sight of the welfare of the social environment in connection with which his efforts are to function. Thus, Butler, though recognizing the individual factor, especially stresses the social by declaring education to be "the gradual adjustment of the individual to the spiritual possessions of the race." Then he further declares: "When we hear it sometimes said: 'All education must start from the child,' we must add, 'Yes, and be adapted to the child.' " Thus the central problem in education of the twentieth and succeeding centuries is to be a constant reorganization of the curriculum and methods of teaching, and this reconstruction must be such as to harmonize a due regard for the progressive variations of the individual with the welfare of the conservative institutions of society. It must include a continual effort to hand on the intellectual possessions of the race, but also to stimulate all individuals to add some modification or new element to the product. In this way there may develop unending possibilities for both the individual and society.

GRAVES, FRANK P., *A Student's History of Education* (New York, Macmillan, 1918), pp. 444-445.

217

The Foundation of Social Reconstruction

The impotence of society is in our day revealed in naked reality. War is hated by the peoples of the world as it has never been hated in human history, and yet all nations are feverishly preparing for war. Upon an earth teeming with bounties men are hungry and cold, not in spite of the fact but because of it. In a world of scarcity with all its attendant human anguish we can manage fairly well, but in a world of abundance we are bewildered and afraid. Loathing war but clinging to it, starving because of plenty, mastered by the machines he has made, man stands confronted and confused by his own helplessness. And the trouble is not primarily with his social technics. It is not that some gears in the organizational mechanism have slipped. It is not a formula that has failed. It is man that has failed. It is in the realm of motives that we must seek the fundamental weakness. Of course, methods and motives react upon one another. Neither can be ignored. But the overwhelming and world-wide catastrophe of our day is the revelation of a purpose too small and an ideal too mundane to nourish and direct associated life. In far-gone days one who "knew what was in man" said, "Seek first the kingdom of God and his righteousness, and all these things shall be added unto you." It was as though he had said, "Make your purpose deep enough and divine enough, and in its onward surge the purpose will find its own channels." Even the best methods cannot be right until ideals are right.

If we are to make a just, humane, and Christian society, a passion to create values must replace the passion to acquire things. Just so long as the dominant desire of men lies in the possession of material resources, we shall have brutalized souls and a careless and cruel society. There is no way in which competition for money and land and power and stocks and bonds may be humanized. However we may veneer the struggle with the amenities of civilization, now and then some upheaval will tear the trappings off and the savagery will be revealed. But when men vie with each other in the creation of spiritual values, they enrich each other. The more of kindness and justice I reveal, the more I bless the life of my brother; the more beauty he creates and the more love he liberates, the fuller he makes my life. To make men creators of beauty, seekers after truth, and revealers of goodness—this, and nothing less, was the undertaking of Jesus. He sought to change men over the whole range of life from acquisitive to contributive beings. "Aye," says some one, "but this means a change in human nature." Of course it does. But human nature can change, and it does change whenever it acquires a new pattern of life.

When the dominant desire of our souls has become the creation of values rather than the possession of things, there is a standard of measurement which we must constantly apply to all actions, all plans, all institutions. It is: "What does this do to human personalities? Does it release and enrich them? Does it dwarf and thwart them? Does this system assume the exploitation of one human soul?" So far as we can see, the divine purpose is the creation of spiritualized personalities dwelling together in a kingdom of kindness. Whatever furthers the higher endowment of human souls is right. The universe is back of it. Whatever starves and hurts souls is wrong, and the curse of God is on it. All our social institutions, our economic systems, are to be created for the one purpose of giving life to man and giving it more abundantly. When a religious system or an industrial order or an economic technic fails in that, from the Christian standpoint, it is a fruitless fruit tree and ought to be dug up for it cumbers the ground.

Boddy, William H., in *The International Journal of Religious Education* (April, 1934, pp. 6-7).

CHAPTER IX

Physical Heredity in Education

THE excerpts in this chapter deal with one of the most fundamental factors in education, the factor of physical, organic, or biological heredity as it is variously called. Strayer and Norsworthy (218) properly regard the child's physical inheritance as the capital with which education must work. Horne (219) emphasizes the fact that from the point of view of physical heredity the child to be educated is as old as the race. Popenoe (220) calls attention to the persistence of germ cells. Galton (223) gives reasons why the average standard of native ability should be raised. Bagley (231) cautions us not to become pessimistic regarding the possibilities of education because of the importance of hereditary influences. The student will find selections 232, 237, 239, and 240 of special interest and value.

218

The Capital with Which Education Must Work

After deciding upon the aims of education, the goals toward which all teaching must strive, the fundamental question to be answered is, "What do we have to work with?" Given a certain nature, certain definite results are possible; but if the nature is different, the results must of necessity differ. The possibility of education or of teaching along any line depends upon the presence of an original nature which possesses corresponding abilities. The development of intellect, of character, of interest, or of any other trait depends absolutely upon the presence in human beings of capacity for growth or development. What the child inherits, his original nature, is the capital with which education must work; beyond the limits which are determined by inheritance education cannot go.

All original nature is in terms of a nervous system. What a child inherits is not ideas, or feelings, or habits, as such, but a nervous system whose correlate is human intelligence and emotion. Just what relationship exists between the action of the nervous system and consciousness or intellect or emotion is still an open question and need not be discussed here. One thing seems fairly certain, that the original nature of any individual is bound up in some way with the kind of nervous system he has inherited. What we have in common, as a human race, of imagination, or reason, or tact, or skill is correlated in some fashion to the inheritance of a human nervous system. What we have as individual abilities, which distinguish us from our fellows, depends primarily upon our family inheritance. Certain traits such as interest in people, and accuracy in perception of details, seem to be dependent upon the sex inheritance. All traits, whether racial, or family, or sex, are inherited in terms of a plastic nervous system.

STRAYER, GEORGE D., and NORSWORTHY, NAOMI, *How To Teach* (New York, Macmillan, 1917), pp. 13-14.

219

The Child Is as Old as the Race

The child to be reared and taught, though small, though but recently born, is as old as the race. Education cannot begin at the beginning; it must take account of a foundation that is already laid. The great claim of children upon their educators is that they be understood. Watch for the appearances of heredity. Treat with them. The child's nature is not a sheet of white paper to be written upon, nor a block of wood to be carved into any form, nor molten brass to be cast into any image, nor rough stuff to be built up in accord with an architect's plan; none of these time-honored images are reliable;

the child's nature is a seed of life with an immanent design, perhaps a whole flower garden, weeds and all. To educate a child is to comprehend the plan of its soul and to assist this plan toward its full realization. Study to know, then, your individual child, and use your knowledge. No two souls are precisely alike, not even of twins. Least of all, then, is education the recasting of all souls in the same mould.

Horne, Herman Harrell, *Idealism in Education* (New York, Macmillan, 1923), p. 45.

220

The Persistence of Germ-Cells

The constitution of the germ-cells, determines not merely whether the fertilized egg will develop into a cauliflower or a cockroach or the Hope of the White Race; but it determines, in the first instance, the ways in which that particular cauliflower, or cockroach, or Hope, will differ from every other cauliflower, or cockroach, or Hope.

The most striking thing about the constitution of the cells is that it continues from generation to generation with so little change. A cauliflower always produces another cauliflower—it never produces a cockroach. There are slow changes, spread over millions of years—these make up evolution. There are slighter changes almost incessantly—these make up variation. But the real changes are much less frequent than is sometimes supposed, for nearly all the differences between children and their parents are due not to any actual alteration in the germ-plasm, but merely to recombinations of the characters of the two parents.

This germ-plasm (which is merely a general name for the stream of germ-cells) has been going on from generation to generation, in an unbroken stream since the beginning of life.

It is the oldest thing in existence.

It is the least changeable thing that lives.

It is the only immortal thing alive.

Popenoe, Paul B., *The Child's Heredity* (Baltimore, Williams & Wilkins, 1929), pp. 7-8.

221

Heredity and Environment in Education

The intellect and character given to an individual by sex, race, and near ancestry furnish the starting point for the general education which he gets from the fortunes of life and the special education which society prescribes for his and its own good. Sometimes these environmental forces bring him into conformity with others, rounding off the corners of his individuality to make it more like the type; in other cases the environment increases initial differences and adds to the total variety of human nature.

THORNDIKE, EDWARD L., *Individuality* (Boston, Houghton Mifflin, 1911), p. 44.

222

Two Schools of Thought

About the middle of the nineteenth century when men began to busy themselves inquiring into the cultural history of mankind, when, in a word, anthropology in its many branches was rising to a status of some dignity, speculation grew rife as to whether there were, in truth, inherent differences in the mental make-up of individuals or of races.

The intellectual leaders of one school were John Stuart Mill and T. H. Buckle, and their influence was great. They professed an unswerving belief in the unlimited powers of education. They accepted without reservation the political aphorism of our colonial forefathers: "All men are created free and equal." And, to give them their due, they succeeded in bringing the greater part of the civilized world to profess a similar belief. I say "profess" designedly, because I believe that deep down in their secret mind, these people do not believe the doctrine at all. The egocentric impulse is too great. But, as a matter of actual record, our modern democratic political and educational systems have been founded and carried on with this outward confession of faith, and socialists one and all have taught it as the true religion.

The leader, or rather the first extremist, of the other school was Le Compte de Gobineau, whose belief is expressed in the title of his chief work, *L'inégalité des races humaines.* He frankly announced, as McDougall quotes, "I have become convinced that everything in the way of human creation, science, art, civilization, all that is great and noble and fruitful on earth, points to a single source, is sprung from one and the same root, belongs only to one family, the various branches of which have dominated every civilized region of the world."

East, Edward M., *Mankind at the Crossroads* (New York, Scribner, 1924), pp. 128-129.

223

Why the Average Standard of Ability Should Be Raised

It seems to me most essential to the well-being of future generations, that the average standard of ability of the present time should be raised. Civilization is a new condition imposed upon man by the course of events, just as in the history of geological changes new conditions have continually been imposed on different races of animals. They have had the effect either of modifying the nature of the races through the process of natural selection, whenever the changes were sufficiently slow and the race sufficiently pliant, or of destroying them altogether, when the changes were too abrupt or the race unyielding. The number of the races of mankind that have been entirely destroyed under the pressure of the requirements of an incoming civilization, reads us a terrible lesson. Probably in no former period of the world has the destruction of the races of any animal whatever, been effected over such wide areas and with such startling rapidity as in the case of savage man. And we too, the foremost labourers in creating this civilization, are beginning to show ourselves incapable of keeping pace with our own work. The needs of centralization, communication, and culture, call for more brains and mental stamina than the average of our race possess. We are in crying want for a greater fund of ability in all stations of life;

for neither the classes of statesmen, philosophers, artisans, nor labourers are up to the modern complexity of their several professions. An extended civilization like ours comprises more interests than the ordinary statesmen or philosophers of our present race are capable of dealing with, and it exacts more intelligent work than our ordinary artisans and labourers are capable of performing. Our race is overweighted, and appears likely to be drudged into degeneracy by demands that exceed its powers.

Galton, Sir Francis, *Hereditary Genius* (London, Macmillan, 1914), pp. 344-345.

224

Conscious Selection of Good Stock

In stressing the idea that many of our best endowments are conferred by social inheritance, we must remember that these advantages cannot come to their best fruition unless based on a good organic inheritance. The eugenist tells us that the principal method by which racial improvement can take place consists in letting good stock reproduce and poor stock remain sterile. This means that every possible measure should be taken to increase the fertility of the best types.

Selection has often in nature produced marvellous changes in both the minds and bodies of animals, and by the aid of conscious efforts sexual selection could be made to produce far more beneficial results to the human race than it is doing at present.

Chapin, Henry Dwight, *Heredity and Child Culture* (New York, Dutton, 1922), pp. 35-36.

225

Nature and Nurture

If there is little or no scientific warrant for our being other than extremely sceptical at present as to the inheritance of acquired characters—this scepticism lends greater importance than ever, on the one hand, to a good "nature," to secure which is the business of careful mating; and, on the other hand, to a good "nurture," to secure which for our children is one of the most obvious and binding duties; the hopefulness of the task resting especially upon the fact that, unlike the beasts that perish, man has a lasting external heritage of ideas and ideals, embodied in prose and verse, in statue and painting, in cathedral and university, in tradition and convention, and above all in society itself.

THOMSON, JOHN ARTHUR, *Darwinism and Human Life* (London, Melrose, 1909), pp. 176-177.

226

Parasites Must Have Hosts

The world will not be peopled ultimately by imbeciles, even with a continuation of the current system. One may rest assured that these people cannot increase their proportion beyond a certain unknown maximum, because gradually the surplus goods produced by the active efficient workers and used to support the drones must shrink. Parasites must have hosts or they perish. Nevertheless, the existent type of charity is certainly dysgenic; it is promoting an unprecedented increase in people, who, for their own good as well as for the good of others, should never have been born. This is pure stupidity, not the attainment of a humane ideal. The most amiable benevolence demands nothing more than the kindly treatment of the individual.

EAST, EDWARD M., *Mankind at the Crossroads* (New York, Scribner, 1928), p. 295.

227

The Meaning of Infancy

At some remote epoch of the past—we cannot say just when or how—our half-human forefathers reached and passed this critical point, and forthwith their varied struggles began age after age to result in the preservation of bigger and better brains, while the rest of their bodies changed but little. This particular work of natural selection must have gone on for an enormous length of time, and as its results we see that while man remains anatomically much like an ape, he has acquired a vastly greater brain with all that this implies. Zoologically the distance is small between man and the chimpanzee; psychologically it has become so great as to be immeasurable.

But this steady increase of intelligence, as our forefathers began to become more human, carried with it a steady prolongation of infancy. As mental life became more complex and various, as the things to be learned kept ever multiplying, less and less could be done before birth, more and more must be left to be done in the earlier years of life. So instead of being born with a few simple capacities thoroughly organized, man came at last to be born with the germs of many complex capacities which were reserved to be unfolded and enhanced, or checked and stifled by the incidents of personal experience in each individual. In this simple yet wonderful way there has been provided for man a long period during which his mind is plastic and malleable, and the length of this period has increased with civilization until now it covers nearly one-third of our lives. It is not that our inherited tendencies and aptitudes are not still the main thing. It is only that we have at last acquired great power to modify them by training, so that progress may go on with ever-increasing sureness and rapidity.

It was thus through the lengthening of his infancy that the highest of animals came to be Man,—a creature with definite social relationships and with an element of plasticity in his organization such as has come at last to make his difference from all other animals a difference in kind. Here at last there had come upon the scene a creature endowed with the capacity for progress, and a new chapter was thus opened in the history of creation.

FISKE, JOHN, *The Meaning of Infancy* (Boston, Houghton Mifflin, 1911), pp. 10-13.

228

Matter and Men Remain the Same

Throughout the long enterprise of civilization in which mankind have more or less consciously changed the world they found into one more in conformity with their desires, two factors have remained constant: (1) the physical order of the universe, which we commonly call Nature, and (2) the native biological equipment of man, commonly known as human nature. Both of these, we are almost unanimously assured by modern science, have remained essentially the same from the dawn of history to the present. They are the raw material out of which is built up the vast complex of government, industry, science, art—all that we call civilization. In a very genuine sense, there is nothing new under the sun. Matter and men remain the same.

EDMAN, IRWIN, *Human Traits* (Boston, Houghton Mifflin, 1920), p. ix.

229

Instincts

Instincts have been defined as guiding impulses which are native and aid the organism in adjusting itself to its environment. The teacher should not only acquaint himself with the most useful classes or kinds of instinct, but he should know at least the important habits that grow out of these in the child's early years.

Slight modifications or changes in application of instincts often become permanent when found to be pleasant. Similarly habits may be modified and rendered more effective for given situations, since all actions are outgrowths of inherited or previously developed tendencies. The importance of knowing the basis is therefore evident. Instincts are guiding impulses which are native and aid the organism in adjusting itself to its environment. They begin with an excitation, and end in a motor response. Since they represent reactions which have proved themselves useful in the conquest of environment, they have a demonstrated value.

ROWE, STUART H., *Habit Formation and the Science of Teaching* (New York, Longmans, 1916), pp. 73, 83.

230

Variation in Native Equipment

In a certain obvious sense, the entire native equipment of any human being is inherited. The various capacities and the relative amounts of them with which a person starts in life are derived from the cells from which the individual originates. The differences among these original cells, even when derived from the same parent, are assumed to vary with regard to any potentiality according to the normal distribution curve about the central tendency of that particular parent. Stalks of corn grown from seed taken from the same ear will vary considerably from one another because the seeds themselves, even from the same ear, are different, but yet they will vary around the general type of the parent stalk. It is therefore obvious that children of the same parents will not be absolutely alike but that they will vary about the central tendency of their ancestors.

STARCH, DANIEL, *Educational Psychology* (New York, Macmillan, 1927), p. 81.

231

Mental Capacity and Education

There seems to be little doubt that the differences in mental capacity shown by different individuals must be attributed very largely to hereditary influences,—to variation in the germ cells. It is not to be inferred from this, however, that educative forces have no significant function in modifying human conduct. In answer to the query, what can education accomplish when the possibilities of human achievement seem to be fixed so rigidly by heredity, the following proposition may be considered.

As pointed out above, education, in the largest sense of the word, can and must furnish every individual, no matter what his native capacity, with the conduct-controls that are represented by the culture-materials of the race. The investigations of heredity do not, at any point, controvert this principle. Capacity for achievement is doubtless inherited, but whether that achievement is on a low or a high plane,—whether the gifted individual unwittingly rediscovers old truths or proceeds from the most advanced position taken by past achievement,—depends upon the success with which education fulfills its mission.

Bagley, William C., *Educational Values* (New York, Macmillan, 1915), p. 94.

232

The Elemental Way of Improving the Race

The influence of heredity in the making of men and women is so profound and yet so subject to human control that at this point we must inquire concerning the practical ways of bettering the human stock by the right handling of this force. To sum up briefly what we now think about heredity and human improvement: The elemental way of improving the race is through the right union of parental germ cells. The chronological beginning of the elevation of human efficiency is in the union of life partners. Education cannot change capacity given by heredity; it can only develop it. There is no democracy in education in the sense that the school can turn out equal minds. Some minds have ten talents, others five, still others one. As Ruskin has it, "But apricot out of currant,—great man out of small,—did never yet art or effort make." The business of the school is to enable each type of mind to put its own inherited talent out to usury. What education does for this generation, the next generation probably does not physically inherit.

Horne, Herman Harrell, *Idealism in Education* (New York, Macmillan, 1910), p. 35.

233

Forcing Natural Propensities

The indications of the natural bent of the mind are so weak and so obscure in childhood, and what the child promises to become when a man is so uncertain and fallacious, that it is almost impossible upon such a foundation to predict his future career. . . . Pups and bears' cubs show their natural disposition as soon as they are born; but men, who are at a very early age indoctrinated with Usages, Opinions and Laws, alter or disguise their real sentiments very readily. And yet it is difficult after all to force the natural propensities; hence it comes about, that when once we have entered upon a false course of training, we trouble ourselves and waste much time in the vain attempt to fit children for pursuits, for which they are not designed by nature.

MONTAIGNE, DE, MICHEL EYQUEM, "Essay Upon the Education of Children," in *Barnard's American Journal of Education,* Vol. IV, p. 461.

234

We Never Gather Figs from Thistles

A man is what he is primarily because he is a member of a certain family, sex, and race. Those three factors give him his inheritance, his capital, his stock in trade, and these birthday gifts bound his ultimate achievement. True, environment, training, education, play their part in the production of man as we idealize him, but that part is conditioned and limited by the nature which is being influenced. In other words, though Burbank may produce a prickless thistle by careful selection, and though we may improve a variety of figs immensely by careful regulation of the environment, yet we need never expect to gather figs from thistles, their natures being originally so differently determined.

NORSWORTHY, NAOMI, and WHITLEY, MARY T., *Psychology of Childhood* (New York, Macmillan, 1918), pp. 18-19; Revised Edition, 1933, p. 35.

235

Heredity and Education

For educational purposes heredity means neither more nor less than the original endowment of an individual. Education must take the being as he is; that a particular individual has just such and such an equipment of native activities is a basic fact. That they were produced in such and such a way, or that they are derived from one's ancestry, is not especially important for the educator, however it may be with the biologist, as compared with the fact that they now exist. Suppose one had to advise or direct a person regarding his inheritance of property. The fallacy of assuming that the fact it is an inheritance predetermines its future use is obvious. The advisor is concerned with making the best use of what there is —putting it at work under the most favorable conditions. Obviously he cannot utilize what is not there; neither can the educator. In this sense, heredity is a limit of education. Recognition of this fact prevents the waste of energy and the irritation that ensue from the too prevalent habit of trying to make by instruction something out of an individual which he is not naturally fitted to become. But the doctrine does not determine what use shall be made of the capacities which exist. And, except in the case of the imbecile, these original capacities are much more varied and potential, even in the case of the more stupid than we as yet know properly how to utilize. Consequently, while a careful study of the native aptitudes and deficiencies of an individual is always a preliminary necessity, the subsequent and important step is to furnish an environment which will adequately function whatever activities are present.

Dewey, John, *Democracy and Education* (New York, Macmillan, 1925), pp. 86-87.

236

Physical Heredity and Progress

Weismann, who has been the leader on one side of this controversy, says that no changes which take place in the life of a parent can modify the germ cells so as to affect the offspring.

Each parent transmits to his offspring what he inherits, but not what he acquires.

If this be true, culture cannot be directly transmitted; each new generation must begin where the old began, and if it advances beyond the former, it must be because of better advantages for learning rather than because of inherited ability. According to this view, acquired weakness of body or mind is also non-transmissible.

In the biological world, progress is possible according to this theory because no two individual descendants are exactly alike, and because the members of each new generation that are best suited to survive under certain constant conditions, are the ones that live and produce descendants, while the others die or produce few offspring. This process being repeated generation after generation, all offspring finally come to have the favorable characteristics in a marked degree. For example, of a dozen young partridges, the ones that are colored most nearly like their surroundings are likely to survive and produce descendants with similar coloring. Again, the most favorably colored of these survive and produce, and thus after many generations the principle of natural selection results in complete color adaptation to surroundings. When a breeder of fancy pigeons continues to breed only those having certain coloring, the results are similar, only in this case it is human instead of natural selection that determines the type of pigeon that shall survive.

Instincts and intelligence are modified in a similar way. For instance, only those young partridges that have in the greatest degree the tendency to remain quiet when danger threatens, are likely to reach maturity and produce offspring. Natural selection, therefore, has thus determined the instinct as well as the coloring of the partridge. In the case of intelligence, the results are much the same. Plasticity or ability to learn is unquestionably favorable to survival; hence the young animals that learn most readily are likely to survive and produce descendants, some of which have the capacity in a greater degree. These in turn survive, and thus may natural selection alone account for the development of intelligence in the higher animals and in man. To them ability to learn in infancy is more advantageous than to know unchangeably many favorable modes of reaction. Thus ability to learn, which is the essence of intelligence, is developed.

The question of inheritance of acquired characteristics is not yet settled in biology, but it is now generally admitted that the characteristics that a parent transmits are chiefly those that he inherited, and that the characteristics acquired by the parent rarely, if ever, so affect the germ cells as to be transmitted to his descendants. In the case of human beings if there is any transmission of acquired characteristics by germ inheritance, it is probably in so slight a degree as to have no effect worthy of note, unless it be where many generations have made the same acquisitions. Progress in civilization is therefore not to be looked for in greater inherited skill or intelligence.

KIRKPATRICK, EDWIN A., *Fundamentals of Child Study* (New York, Macmillan, 1921), pp. 19-20.

237

The World Question

This is the world question; it is a question of reducing a swiftly increasing population to fit a rapidly diminishing food reserve. But there is also the eugenic problem, that of endowing the next generation with better traits than were possessed by the last, or at least of not permitting them to become continually worse; and apparently it yields to the same solution as the other. Today the finest families are hardly replacing themselves. The incompetent are taking their place. And this will continue should there be no eugenic reform until that point of equilibrium is reached where no more do-littles can be accommodated. There can be no real decay, the generally good heredity of the masses precludes; but there can be a very marked deterioration.

East, Edward M., *Mankind at the Crossroads* (New York, Scribner, 1928), pp. 349-350.

238

Education Means Possibilities of Reaction

We are by this time fully launched upon the biological conception. Man is an organism for reacting on impressions: his mind is there to help determine his reactions, and the purpose of his education is to make them numerous and perfect. Our education means, in short, little more than a mass of possibilities of reaction, acquired at home, at school, or in the training of affairs. The teacher's task is that of supervising the acquiring process.

This being the case, I will immediately state a principle which underlies the whole process of acquisition and governs the entire activity of the teacher. It is this:

Every acquired reaction is, as a rule, either a complication grafted on a native reaction, or a substitute for a native reaction, which the same object originally tended to provoke.

The teacher's art consists in bringing about the substitution or complication, and success in the art presupposes a sympathetic acquaintance with the reactive tendencies natively there.

Without an equipment of native reactions on the child's part, the teacher would have no hold whatever upon the child's attention or conduct. You may take a horse to the water, but you cannot make him drink; and so you may take a child to the schoolroom, but you cannot make him learn the new things you wish to impart, except by soliciting him in the first instance by something which natively makes him react. He must take the first step himself. He must do something good or something bad. A bad reaction is better than no reaction at all; if bad, you can couple it with consequences which awake him to its badness.

James, William, *Talks to Teachers* (New York, Holt, 1899), pp. 38-39.

239

What Can Be Done to Improve the Human Race

If the human race is ever improved it is you, my dear reader, who will have to do it. This chapter is written without apology as a direct personal appeal. Improving the human race is your task. You can not delegate it to somebody else. It can not be done by some Society for Human Improvement holding monthly meetings and reading esoteric papers to its members. It can not be done by law. You can not legislate a better human race into existence. It can not be done by some wonderful invention. You might invent a better electric light or social system or plan of education. But you can not invent better babies. They simply have to be born.

Each particular baby has to be born from some particular pair of parents; and the sort of parents they are determines the sort of baby that is going to be brought into the world. The kind of human being this particular baby is going to be does not depend upon where he is born but from whom he is born. As old Sir Thomas Browne said, "Give thanks to Heaven, not that thou wert born in Athens, but that thou wert born from noble parents, and that honor, virtue and integrity lay in the same egg and came into the world with thee."

Consequently the whole problem of human improvement centers around the word "selection." Whether the human race is going to go up or down, forward, backward or sidewise, depends upon whom you select as your partner in producing that baby. If your partner is better than you are, not only better physically and mentally, but is from better stock, that is, carries better germ-cells than you carry, the race will go up. Most of your babies will be better than you are. If the partner is worse than you are, worse mentally and physically, or even better mentally and physically, yet has sprung from worse stock and consequently carries worse germ-cells than you carry, then the race will go down. Most of your babies will be worse than you are. A few might be as good but the average would be worse. And, even those who are as good as you are would carry the bad germ-cells of the ancestors of the commonplace partner, and the next generation would be lower still.

Wiggam, Albert Edward, *The Fruit of the Family Tree* (Indianapolis, Bobbs-Merrill, 1924), pp. 353-354.

240

Heredity, Environment, and Choice

There are some who should not be blamed for what they do; for them, poor souls, heredity and environment have set limits which closely cramp and narrowly confine, but for most of us there is plenty of unoccupied territory. Heredity and environment are far kinder to the average human being than most of us are willing to admit. Rare indeed is the man whose attainments equal his possibilities, who actually makes the most of his life.

Within the limits thus determined for him, each individual seems to choose where and how he shall live. Or does heredity select from among the offerings made by environment? An enticing theory, is it not? Environment puts the circle round about our lives; heredity determines the choice of the particular quadrant of the circle in which we shall live.

That there has been choice can not be denied by the believer in evolution. The record of the rocks indicates that the forward steps in life development have at each stage been taken by only a very few individuals among the many for whom the opportunity was available. Back in the Devonian period, for example, long before the Appalachian Mountains were crumpled upward along the eastern border of this continent, there were living a host of so-called "lung fishes." At that time in the region now occupied by the northeastern States, there was a semitropical environment with profound variation from an excessively dry to an excessively wet season each year. The compulsion of seasonal dryness seems to have exerted an awakening influence upon those lung-fishes, and from them, at that time and in that place, evolved the amphibians, the first air-breathing vertebrates. But perhaps no more than one or two in each generation of those Devonian lung-fishes took the opportunity to develop the organs and structures which eventually permitted those first venturesome amphibians to walk out on the land. Many were called, but few were chosen. The gains in the history of life have been made by risk-taking minorities in spite of the overburden of conservative majorities. In the human heritage there is no taint; nature's derelicts have ruthlessly been weeded out; of our heredity we may well be proud.

But in the last analysis it is environment which has determined heredity. If all living species of animals and plants have arisen through modification from one single-celled, primordial plant-animal, as we evolutionists believe, then the differences in heredity are either purely imaginary or are themselves a response to varying conditions of environment. The only other alternative which might as a wild but possible working hypothesis be considered is the thought that in the beginning of life there were many primordial one-celled organisms, each of which was then fore-ordained and predestined to be the ancestor of a line of offspring reaching to each existing or extinct species. That to the evolutionist is unthinkable because of the obvious close relations of living creatures. The "tree of life" is rather a great shrub with a single central root or stem from which the branches divide and subdivide again. The creatures of today are the tips of these many branches. We may trace back each tip into its twig, the twigs into the branches, the branches into the limbs and the limbs into the central stalk. Evolution began when the first living cell became two separate individuals, the second generation of living creatures upon the face of the earth. The differences in the heredity of those two individuals must have been determined by the surroundings of their parent cell at the moment of division. Environment can not at the same time offer opportunities for choice and determine which opportunity shall be chosen. We escape from the vicious circle of such reasoning only by assuming that each organism does in some way, of its own free will and accord, choose from certain limited potentialities of existence those which shall for it be realized as actualities. And therein is the real difference between organisms and machines.

The geologic record shows unmistakably that the number of choices available for living creatures has steadily increased throughout the ages. For example, the limits within which vertebrate life can exist have notably expanded. At first, back in the early part of the Paleozoic era, the vertebrates could live only in an aquatic environment, for they were all fishes and must breathe by means of gills. Then, a little later, some of the vertebrates conquered the air. Birds are obviously at home in a greater variety of environments than are fishes.

So the limits circumscribed about each individual have expanded as a result of evolutionary progress. Thus, living creatures, the offspring of the earth, have been gradually subduing the earth. Vital energy has discovered how to manifest itself in new and previously untried environments, has developed the ability to express itself in a greater and greater variety of ways.

The real measure of the progress of life from stage to stage is the diversity of opportunities for self-expression which are available at each stage. On such a basis man may be compared with other organisms. The so-called lower animals have ordinarily specialized in adaptation to some particular environment: horses to prairies, alligators to swamps, horned toads to deserts. But man has specialized in adaptability to all environments. Man alone, among highly specialized animals, can live where he pleases: in the tropics or at the poles, beneath the sea or high in the air, deep down in the ground or on the mountain summit. Man is a specialist in adaptability, not in adaptation.

Man has succeeded in developing adaptability because he began early, when the body was still quite generalized, at the time when the ancestors of man were as unlike us as Eohippus was unlike the modern species of horse. Man has retained even to the present day many features of the generalized body of primitive mammals. He has thirty-two teeth; progress in the development of vertebrate jaws is marked in other forms of life by reduction in the number of teeth, but man has retained almost, although not quite, the maximum number which mammals can have. Man has five fingers and five toes: the horse has far exceeded him in the development of appendages for locomotion, by reducing the digits to one. The horse is a specialist in locomotion and can easily outdistance man when man plays fair and races on foot. Instead of specializing in some one activity, the ancestors of man retained the more generalized body structure and made possible the adaptability which modern man displays.

At the same time, man has succeeded better than any other creature in remaking environments to suit his whims. The beavers build a dam to create the environment of the swamp in which they want to live. The tropical ants build mounds to serve as islands on flooded river flats. But man does more to the face of the earth than all the other animals combined. He drains marshes and irrigates deserts. He strips the trees from forested hillsides in the eastern states to develop farm lands and pasture fields; whereas on the treeless prairies of Kansas and Nebraska he plants trees for a windbreak at the far side of the wheat field, or a shelter and a shade for his farmstead. As he thus succeeds in molding his physical surroundings closer to his heart's desire and at the same time in adapting himself to a wider range of living conditions, he frees himself from the control of environment; or, more accurately, he enlarges the limits within which environment confines him. He pushes back the horizon and discovers for himself new areas of self-expression. If this be true for mankind collectively, then necessarily it must be true for men individually.

With increasing opportunity for choice there comes increasing responsibility upon the chooser. Making all due allowances for heredity and environment, still it is true that each normal human being must stand on his own feet, must accept the consequences of his own decisions. When a man makes up his mind, he changes the course of history. Perhaps it is only so trivial a thing as the selection of mayonnaise rather than Russian dressing for his salad, but history is merely a summation of trivial events. Therefore, ideas govern the world.

Just what is involved when the organic prerogative of making a choice between two lines of conduct is exercised can not now be told. That is to say, the laws by which the organic world is being governed are not yet understood. That there are such laws is an inescapable inference from all that we know about ourselves and the world in which we live. The mystery about them does not invalidate the fact of their existence.

In the attempt to penetrate this mystery, the psychologist does well to study the reactions of the so-called "lower animals" to stimuli of one sort and another, but it should always be remembered that new modes of action in obedience to new laws have emerged from the process of evolution. Just as the living cell is distinguished from the non-living crystal, so is the psychical distinguished from the merely physiological, the social from the solitary. It should not be assumed that human actions must in every particular follow the same principles as those of other organisms. Wherein man differs from other creatures is to be discovered by experiment, observation, and experience, and in no other way; it is purely a question of observable fact.

Out of a world governed by the law of gravity and the laws of atomic structure is emerging a world in which mentality is a powerful directing force, a world in which purpose does make a difference, a world wherein "intelligence is practical and a source of power." This history of the past leads directly to the conclusion that it is perfectly reasonable to hope and strive for the realization of ideals that have never yet been realized.

When new conditions arise, new laws become operative. The very fact that men attempt to determine their own conduct, to transform the world in which they live, to instill more satisfactory ideals in the minds of themselves and of their fellows, is fair ground for the expectation that these very things will be accomplished. Apparently, in the past, the things which organisms tried to do were the things which organisms sooner or later were able to do. A world evolving as our world seems to evolve is absolutely governed by ideas.

If men actually do make up their own minds, as they certainly seem to do, then thoughts are more significant than the mechanism by which they are expressed. Mysterious though it be, the imponderables are just as real as the ponderables. Our inability to explain all that we know is disappointing and perplexing but most of us have found it rather necessary to accept the universe. The mystic takes the facts as he finds them. He believes that the spiritual is just as real as the material, the abstract as the concrete, the values as the things valued, the personality as the person. Explain it or not, the fact remains that man is something more than the mechanism perceptible to the five senses.

MATHER, KIRTLEY F., *Science in Search of God* (New York, Holt, 1928), pp. 95-105.

CHAPTER X

Social Heredity in Education

THE material in this chapter deals with the vast subject of the social inheritance as a factor in education. The treatment of this subject must necessarily be incomplete and sketchy in a work of this kind. In selection 241 Horne gives a definition of "the social environment, responsible for 'social heredity.'" Conn (242) contrasts man as a product of physical, organic, or biological heredity with man as a product of social heredity. The quotation from Kirkpatrick (243) shows that Weissman's theory of heredity offers no excuse for pessimism with regard to the possibilities of education. Throughout the chapter the student will find statements setting forth the influence and importance of the social inheritance in the making of man. The chapter ends with excerpts from *Education, Crime, and Social Progress,* a critical and timely work by Professor William C. Bagley, which should be read by everyone who is interested in the welfare of American education.

241

The Social Environment

The social environment, responsible for "social heredity," influences those animals actuated by the group impulse, including man. It includes all forms of association, the use of language, the expression of the emotions in the crowd, habits, customs, conventions, fads, fashions, and moral standards.

The greatest element in the social environment of man, not appearing among the animals, is ideas, public opinion. Men adjust themselves to the ideas of other men, to what society on the whole approves. Public opinion is the main reliance of social progress. It is subject to rapid change with correspondingly rapid social improvements. Public opinion may come to condemn the methods of nature, which preserve the race, and favor the methods of philanthropy, which preserve the individual. Its scope is greatest in a democratic form of government. Education, too, is made possible by the social environment; educating, in fact, is purposely directing social heredity for the benefit of the young. John Stuart Mill illustrates this point of view in defining education as "the culture which each generation purposely gives to those who are to be its successors, in order to qualify them for at least keeping up, and, if possible, for raising, the level of improvement which has been attained."

HORNE, HERMAN HARRELL, *Idealism in Education* (New York, Macmillan, 1923), p. 63.

242

Man as an Animal Contrasted with Man as a Social Unit

In man there are two more or less distinct natures. These we may perhaps best understand under the terms of his animal and his social nature. By the former he possesses his body with its bones and muscles, its brain and sense organs, its instincts and mental powers. By the latter he has those attributes that make him a social unit. His animal nature makes him an animal much like others, but it is the other side of his nature that makes him a man in the unique sense in which that term is commonly used when contrasted with animal. While it is true that his evolution as an animal may have been controlled by the same laws as those that have produced the evolution of the rest of the animal world, this does not necessarily apply to his evolution as a social individual, since this particular development has been a unique one. It is one purpose of this work to show that this social evolution has not been controlled by the same laws that have dominated organic evolution in general.

The contrast between the animal man and the social man is an extraordinary one, but one which science rarely takes the pains to draw. Man the animal, except as concerns his brain and brain power, does not by any means stand at the summit of the animal kingdom. Many animals excel him in strength, in agility, in ability to defend themselves or to master enemies. He is poorly protected from the weather, for his skin is naked; his powers of flight are feeble compared with many other animals; his body, seemingly built for an arboreal life, is poorly adapted to life on the ground, and the upright position he has assumed entails many points of weakness. His senses are not so keen as those of some animals. His children are weak and helpless for a longer period than any other animal. Thus in many respects he is not particularly well built as an animal, and other lower animals are in these points his superior.

But when we turn to the question of man as a social unit we find a very different story, since no animal is his equal in any one of the above-mentioned respects. No animal compares with him in strength when he uses the machines that he makes; no animal is so well protected from the weather as he is with his artificial clothing, his houses, and his fires; no animal can see as far as his telescope or so minutely as his microscope, nor can any hear as far as his telephone, and none can compare with him in the ability to rear and maintain his offspring on the earth. In every and all respects he is the superior of animals when the totality of human life is concerned, but he is superior not from his powers as an animal but from the powers given him by society.

CONN, HERBERT W., *Social Heredity and Social Evolution* (New York, Abingdon, 1914), pp. 17-18.

243

Environment and Education

The acceptance in whole, or even in part, of Weismann's theory of heredity seems at first to make the problem of the improvement of the human race an almost hopeless one, since each generation gets no direct benefit from the improvement of the preceding generation, but must begin just where it did. A closer study, however, shows that the chances for racial improvement are just as good on the basis of this theory as on that of any other. Capacity for education, rather than increased knowledge and power at birth, is what human beings need in order that they may advance; and natural selection will amply provide for this, especially in these days of rapid change in the conditions and activities of life.

The other factor most needed for racial advancement is a more favorable environment—greater intellectual and social treasures—which may be appropriated by the new generations without the toilsome digging required by their predecessors. Each new generation inherits, not only the wealth and knowledge of the race, but all the means of wealth and knowledge, such as machinery, industrial and commercial organizations, educational and scientific institutions, systems and methods, together with more or less fixed social ideals, customs, and language. Whether a man inherits the minute structural changes produced in his parents' bodies by what they did before his conception, is a matter of little moment compared with his inheritance of capacity and opportunity for using all the accumulated results of the experience of the ages. It is this inherited environment in which he is to grow, and upon which he is to feed, that chiefly determines the amount and direction of his development. All the conditions of life produced by civilization constitute what, in a very general way, may be called "social inheritance." Man is truly "the heir of all the ages," and each generation utilizes what has been produced and learned by the preceding. The social heritage of an individual consists of all the knowledge, beliefs, customs, laws, and language of the nation, community, and family into which he is born.

Much of what has been ascribed to physical heredity is, in reality, due partially or wholly to social heredity. The history of the Jukes family, in which it is shown that nearly all of more than a thousand descendants of one man were criminals or paupers, proves nothing regarding physical heredity, for the family was for many years almost isolated from society; consequently, the factor of social heredity had the fullest chance to operate. The children of a young couple belonging to this family who moved into another locality, and thus partially got the benefit of a different social inheritance, grew up much as other children of the neighborhood. The records of charitable societies show that about eighty-five per cent of the children of paupers and criminals who are placed in good homes at an early age become good citizens.

Every nation and every family possesses a wealth of beliefs, sentiments, artistic and moral ideals, lore, traditions, and customs which descend to the children by an incontestable law of entail. Truly, in educating a child, we should begin with his grandparents; for he will inevitably get the benefit through social heredity in the form of family customs, habits, and traditions, though probably not through inherited acquisitions.

Improvement in the human race may be brought about first by making a better home and community environment which will give the best opportunity and stimulus for the development of desirable qualities, and second by improving the methods of instruction so that the children shall be able to take swift and complete possession of their valuable inheritance in material, social, and intellectual lines and use it efficiently. From the individual standpoint heredity should neither be ignored as of no importance nor yielded to as inevitably fixing one's destiny. Instinctive and hereditary tendencies are the roots from which the physical, mental, and moral life develops. Some individuals may develop more readily, and to a greater degree than others, all or some human characteristics, but each may make the most of his environment. Some cannot go as far as others in certain directions nor as easily, but no one has exhausted his possibilities of development. The practical problem is to expend our efforts upon the useful characteristics which we possess in the greatest degree.

KIRKPATRICK, EDWIN A., *Fundamentals of Child Study* (New York, Macmillan, 1921), pp. 27-29.

244

Physical versus Social Heredity

Man shares with the rest of the animal kingdom certain characteristics. These include his physical nature, a body made of a series of organs similar to those which are possessed by his close allies among the lower animals. They include, too, whatever of instinct he may possess; for while instincts do not play a very large part in human life, they are not wanting. With animals too man shares a brain, and his brain is closely similar to that of some of the higher animals. Mental powers too he shares with them; although manifestly they are more developed and upon a higher plane, since his mind is capable of much that is quite beyond the capacity of other animals. Concerning all these animal characteristics, the logic of the argument that human evolution has been controlled by the same law as that of animals is irrefutable. Since man is so closely like other animals, all of the arguments which apply to the organic nature in general apply also to him, and logical consistency forces us to recognize the origin of this being as the result of the same forces that have produced other species.

But there is the second phase of human life which, more than his animal nature, constitutes the real nature of mankind, and this consists not in the characters he possesses as an animal but in those which he possesses as being a member of society. These he does not share with any animals, and, as we shall see later, he owes them to a totally different set of laws from those which have determined his animal characteristics. To this whole set of characteristics the conclusions of eugenics, and the rather hopeless deductions from modern studies of heredity, fail to apply.

CONN, HERBERT W., *Social Heredity and Social Evolution* (New York, Abingdon, 1914), pp. 20-21.

245

Safety of Home and Streets

By all means let us preserve the safety of the home, but let us also make safe the street in which the majority of our young people find their recreation and form their permanent relationships. Let us not forget that the great processes of social life develop themselves through influences of which each participant is unconscious as he struggles alone and unaided in the strength of the current which seizes him and bears him along with myriads of others, a current which may so easily wreck the foundations of domesticity.

Addams, Jane, *The Spirit of Youth and the City Streets* (New York, Macmillan, 1916), p. 47.

246

Education the Strengthening of Weak Characters

Education is the strengthening of weak characters—those that heredity tends to dwarf by the very differentiation which, acting upon other characters, renders them strong, natural and more advantageously inherited. Conscious processes must be directed toward the weak side of human nature, to round the character so that in each individual all parts are strong. Education cannot improve on natural characters. Progress is the development of the strong, not where they are strong, but where they are weak. The strength of the strong character is the result of a natural differentiation with which men have little to do, but the strength of weak characters is in their hands. Men can level up their weaknesses until their whole nature is strong.

Patten, Simon N., *Heredity and Social Progress* (New York, Macmillan, 1903), pp. 173-174.

247

The Social Heritage Must Be Adapted to Present Needs

The problem, however, of social inheritance does not simply consist in the difficulty of handing down a steadily growing accumulation of arts and sciences, and organizing its use. Each generation, if it is to live happily and harmoniously, or even is to avoid acute suffering, must adapt to its present needs the social heritage which it received from the preceding generation. The exhaustion of an old source of supply of food or raw materials, the appearance of a new disease, or an increase of population, may, of itself, make obsolete old arts and sciences and customs, and make new discoveries necessary. A new discovery, again, like that of printing or the compass, or steam, or gun powder, or the microscope, or representation by election, or biblical criticism, or of such ideas as nationality or socialism, may compel the readjustment of tradition in a hundred ways. . . . If reconstruction is to be successful, new knowledge, the discovery of hitherto unknown relations of cause and effect, will in some cases be required. In other cases knowledge already accumulated must be applied by newly invented expedients to new problems. Sometimes what will be needed is an alteration of the proportion of the limited learning-power of the growing generation allotted to different types of study, and of the emphasis given in education to this or that element in the past experience of mankind. Sometimes we shall have to make the painful effort of unlearning what we have been taught, and of breaking intellectual and emotional habits.

WALLAS, GRAHAM, *Our Social Heritage* (New Haven, Yale University Press, 1921), p. 20.

248

Need of Equal Opportunity for the Exercise of Mental Powers

The trend of the whole investigation has been in the general direction of showing that great men have been produced by the co-operation of two causes, genius and opportunity, and that neither alone can accomplish it. But genius is a constant factor, very abundant in every rank of life, while opportunity is a variable factor and chiefly artificial. As such it is something that can be supplied practically at will. The actual manufacture, therefore, of great men, of the agents of civilization, of the instruments of achievement, is not a utopian conception but a practical undertaking. It is also comparatively simple, and consists in nothing but the extension to all the members of society of an equal opportunity for the exercise of whatever mental powers each may possess. There are many artificial substitutes for the various kinds of favorable environment, but since, as we have seen, these are effective only to the extent that they constitute an educational environment and are, in fact, only so many aspects of the educational environment, it is obvious that this is the real factor in the development of genius and the progress of civilization. If, therefore, the educational environment can be supplied, the rest may be dispensed with, and the real end to be attained is simply and solely the establishment on a gigantic and universal scale of an educational environment.

Ward, Lester F., *Applied Sociology* (Boston, Ginn, 1906), pp. 220-221.

249

The Social Organism Stores up Acquired Characteristics

The social organism, especially as a moral order, is just the opposite of the individual organism in this that it can and does store up acquired characteristics. If we have lost transmission of them in one place—which loss as Professor Adams argues may well prove to be an ultimate gain—we can find them in another place. Professor Thompson indicates it plainly. "Of particular importance," he says, "is the fact that man, in contrast to other creatures, has developed around him an external heritage, a social frame-work of customs and traditions, of laws and institutions, of literature and art, by which results almost equivalent to the organic transmission of certain kinds of modifications may be brought about." . . . "The function of social heredity is to pass on from generation to generation the gains that advancing civilization brings."

The school is an organism just to the extent that it is a social order, and, as such, or in addition, the incarnation and expression of moral and religious truth. We are clear about the nature of this organism. It is true that, as Wallas says, the term implies, "not merely that the associated human beings influence each other vitally and consciously, but that their association has a conscious life of its own, apart from the many lives of the individuals who constitute it—that a community (e.g. a school) is an 'organism' or 'body' in the same sense in which a man is." But a school and any society which stands for certain purposes, ideals, and traditions, has objectivity, and is a reality, one of the most pervasive of all realities for its loyal members. And perhaps no better proof of its objectivity and reality can be found than the fact we are emphasizing now, that it holds and transmits from day to day, from year to year, and from generation to generation those purposes, ideals, and traditions which its members contribute. That fact, whatever views we may hold as to the nature of its ultimate being, is one of paramount importance. There is no beginning all over again, no fresh start, in the case of a school, as there probably is, so far as acquired habitudes go, in the case of an individual. Its vitality and value as a social and moral order is, at any moment, the product and expression of all its past history.

ADAMSON, JOHN E., *The Individual and the Environment* (New York, Longmans, 1921), pp. 323-325.

250

Man's Influence on Environment and Himself

We may consider genius as a force, because it consists, as has been shown, of intellect and will. Will is a true natural force, and we have in this combination both the dynamic and directive agents of society. . . .

It is man's combined influence on his environment and on himself that chiefly constitutes civilization. In other words, it is his action, and without such action on his part there could be no civilization. To use Mr. Morley's illustration, if all men were to fall into a deep sleep for ages, and then awake, they would find that the environment had done nothing for them during that time. Whatever might have been the civilizing movements in process when they ceased action these would cease when their action ceased and could not be resumed until their action was resumed. . . .

Civilization is the result of the activities of all men during all time, struggling against the environment and slowly conquering nature.

Ward, Lester F., *Applied Sociology* (Boston, Ginn, 1906), pp. 129-132.

251

Influence of the Social Environment

Whatever the moral and intellectual progress of men may be, it resolves not into a progress of natural capacity, but into a progress, if I may say so, of opportunity; that is, an improvement in the circumstances under which that capacity after birth comes into play. Here, then, lies the gist of the whole matter. The progress is one, not of internal power, but of external advantage. The child that is born in a civilized land is not likely, as such, to be superior to one born among barbarians; and the difference which ensues between the acts of the two children will be caused, so far as we know, solely by the pressure of external circumstances; by which I mean the surrounding opinions, knowledge, associations, in a word, the entire mental atmosphere in which the two children are respectively nurtured.

On this account it is evident that if we look at mankind in the aggregate, their moral and intellectual conduct is regulated by the moral and intellectual notions prevalent in their own time. There are, of course, many persons who will rise above those notions, and many others who will sink below them. But such cases are exceptional, and form a very small proportion of the total amount of those who are nowise remarkable either for good or evil. An immense majority of men must always remain in a middle state, neither very foolish nor very able, neither very virtuous nor very vicious, but slumbering on in a peaceful and decent mediocrity, adopting without much difficulty the current opinions of the day, making no inquiry, exciting no scandal, causing no wonder, just holding themselves on a level with their generation, and noiselessly conforming to the standard of morals and of knowledge common to the age and country in which they live.

Now, it requires but a superficial acquaintance with history to be aware that this standard is constantly changing, and that it is never precisely the same even in the most similar countries, or in two successive generations in the same country. The opinions which are popular in any nation, vary in many respects, almost from year to year; and what in one period is attacked as a paradox or a heresy, is in another period welcomed as a sober truth; which, however, in its turn is replaced by some subsequent novelty. This extreme mutability in the ordinary standard of human actions shows that the conditions on which the standard depends must themselves be very mutable; and those conditions, whatever they may be, are evidently the originators of the moral and intellectual conduct of the great average of mankind.

BUCKLE, HENRY THOMAS, *History of Civilization* (New York, Appleton, 1885), Vol. I, pp. 128-129.

252

Education in the Folkways

Quite clearly it becomes one of the functions of modern education to transmit to the new members of the group the significant and vital parts of the folkways of the group. That is a function which is performed when boys are inducted into tribal society; it is illustrated further by the information which is given to girls, by mothers, in some tribal organizations at the time of approaching womanhood. We attempt to secure adherence to the folkways when we naturalize, when we celebrate holidays, birthdays as well as other family, community and national functions. Birthdays and anniversaries have their distinct celebrations, ceremonies and gifts. The induction of children into the religious group, the marriage of two persons, the conventional conduct of husbands and wives, together with an infinite number of other societal acts, are regulated by the folkways. The clothes we wear for various occasions, the behavior at various functions—weddings, funerals, teas, dinners, games, together with the attitudes maintained toward members of the opposite sex, toward public officials, parents, employers—these and a score of similar behavior situations are regulated by the strict code of the folkways.

These phases of education are only a few of the many that might be carried out. Whatever these materials might be named—civics, civic training, civic virtue, or morals and manners, or character education—they nevertheless constitute a body of material with which all persons are likely to have some experiences. Of course, to experience is to be educated. However, the school may be able to provide certain patterns of behavior which would serve in shaping the conduct of the persons under varying social conditions.

That the code of group behavior is greatly neglected is evidenced in the eagerness of adolescents to know "etiquette"—the correct behavior which is supposed to be transmitted through books of an antiquated vintage, as well as through the columns of newspapers in which a mythical personage acts as social arbiter and dictator. That boys and girls reach maturity not knowing how and when to act is a reflection upon the school. However, the school should engage in no such nonsense as attempting to teach behavior formally. It comes, as do all other worthwhile experiences, from doing, and the school group has not completed its activities if it neglects dinners, parties, teas and dances as a part of its body of material to be used in the socialization of its members.

A large part of the conventional material of the curriculum consists of the folkways in definite, printed form. What is the material of notation except the product of man's experience with the digits? What is the historical record except man's account of his experiences, even though he has shown poor judgment concerning the important and unimportant events? What is the body of literature except the expression of man's observation and imagination through the medium of the alphabet? Geography consists of the assembled material on the nature of the earth. Biology includes the accumulated knowledge of the physical structure and function of living organisms. All of these accumulated experiences of man constitute a considerable part of the school curriculum. They are being taught on the sociological assumption that the school should transmit to the group all of the valuable experiences of the race. Whether the experiences are valuable depends upon their application to present-day living.

KINNEMAN, JOHN A., *Society and Education* (New York, Macmillan, 1932), pp. 266-268.

253

Factors Underlying Ganging

Boys in gangland areas enjoy an unusual freedom from restrictions of the type imposed by the normal controlling agencies in the better residential areas of the city. Their play is usually unhampered and the extensive railroad, canal, and industrial properties furnish them a realm for adventure that is unexcelled in the playgrounds or in the more orderly portions of the city. There is no dearth of excitement in this disorganized environment, and in the gang they find an instrument for the organization of their play and the satisfaction of most of their wishes. The free, wild life they lead under such conditions constitutes one of the chief obstacles to the sort of direction which any boys'-work program attempts. The problem of competing with the care-free activities of the gang is a difficult one and requires a high degree of intelligence and understanding on the part of any leader or agency attempting to meet it.

In describing in a summary way the underlying conditions of disorganization in gang areas, we are simply attempting to explain the factors that make possible the freedom which leads to ganging. We are merely describing the soil which favors the growth of gangs. Such underlying conditions as inadequate family life; poverty, deteriorating neighborhoods; and ineffective religion, education, and recreation must be considered together as a situation complex which forms the matrix of gang development. It seems impossible to control one factor without dealing with the others, so closely are they interwoven, and in most cases they are inseparable from the general problem of immigrant adjustment. Thus, in any individual case of the entrance of a boy into a gang, several of these factors usually interact to create such an opportunity.

While recognizing the importance of studying the interplay of the forces of disorganization in the case of any given gang boy, it is possible, however, to disentangle these underlying conditions from one another and, for purposes of discussion, to treat each separately. The value of this method lies in making clearer the influence of each factor and in suggesting methods of attacking the problem in each case.

Any condition in family life which promotes neglect or repression of its boy members, indirectly promotes the gang by stimulating the boy to find the satisfaction of his wishes outside the plan and organization of family activities. This, like such other underlying factors as ineffective religion, inadequate schooling, and unguided recreation, is a purely negative factor so far as the gang is concerned, merely creating an opportunity for ganging or any other kind of substitute activity. The family deficiencies which may make ganging possible are of a great variety of types—poverty; immigrant maladjustments; disintegration; and ignorant, unsympathetic, immoral, or greedy adults, but their general effect is the same: the family fails to hold the boy's interest, neglects him, or actually forces him into the street. These family conditions interact in the usual case, but it is noteworthy that, either singly or in combination, they are rarely absent from the homes of gang boys.

The failure of present-day religion to penetrate in any real and vital way the experience of the gang boy may be cited as a second negative factor which makes possible the free life of the gang. The lack in this case is the failure to provide controls of the boy's behavior and interesting activities for his leisure time to supplement those of the home, the school, and the playground.

The third negative factor which contributes to an opportunity for the free life of the gang, is the type of schooling which does not interest the boy or provide for a satisfying organization of his lively energies. This occurs in two ways: first, the procedure within school hours does not interest the gang boy, who resorts to truancy; and secondly, the school does not have an adequate program of extra-curricular activities to supplement the work of other agencies in meeting the spare-time problem.

There is one failure of the educational machinery to run smoothly which is very favorable to the development of gangs. This is the fact that the compulsory education law in Illinois permits a boy to quit school at fourteen, but forbids him to go to work until he is sixteen without a working certificate or the observance of special conditions by his employer. The result is that many boys who leave school at fourteen are idle or irregularly employed until they are sixteen. They do not go to school; they have difficulty in getting a job. Free to roam the streets, the gang furnishes the solution of their problem as to how to occupy their time. Society, as it were, provides in such cases two years between school and work for gang training.

The fourth negative factor which contributes to a situation favorable to ganging is the lack of proper guidance for spare-time activities. The recreation of boys who become "wholesome citizens" is guided by parents, friends, teachers, and recreational leaders, but this guidance is largely absent in gangland areas. The point is not that children do not play in gangland. They do.

THRASHER, FREDERIC M., *The Gang* (University of Chicago Press, 1927), pp. 490-493.

254

Man's Reconstruction of Nature

The difficulty in applying the principle of natural selection to education is that we do not intelligently determine who are the fittest. In nature the conditions demanding adaptation are comparatively simple and definite. This is true also of primitive man and, indeed, quite largely of early civilized society. But the enormous enlargement of human interests dims our vision. In one respect the lower animals have the advantage of us in their instinctive educational methods. Their teachers are never troubled by doubts concerning the ability of their pupils. All receive equally careful training for life. They do not prejudice the future of any by an adverse verdict so early in life that the best in them may not yet have appeared. They train all in the best way for success, which in their case means survival, and then leave the final decision to natural selection. The conclusion of one of England's foremost statisticians that the senior wrangler has twenty-five times the innate ability of the lowest on the honor list, because in one year the former obtained 7,500 credits to 300 of the latter, is one of the humorous results of the so-called scientific method of investigation. Against the hallucination of such measurements let us firmly hold to the facts marshalled in previous pages that Darwin's father prognosticated that he would disgrace his family because he cared for nothing but shooting, rat-catching, and dogs, that Harriet Martineau was a dull child, and Seward "too stupid to learn," that Isaac Newton at twelve led his class at the foot, that Samuel Johnson was lazy, Robert Fulton a dullard, Oliver Goldsmith insufferably dull according to his teacher, Byron lowest in his studies, Richard

Sheridan insignificant as his teacher saw him, John Hunter slow and late to learn, Linnaeus, in view of his stupidity, recommended by his pedagogue to be a cobbler, and that Dean Swift through "dullness and insufficiency," and Goethe likewise from seeming inability, forfeited their degrees.

It is not to be forgotten that the survival of the fittest is always relative to the conditions demanding adaptation, and, while animals have no preference, man may exercise a choice as to the conditions to which he will adapt himself, and this is broadly the distinctive human quality. The cleverest boys in the slums of New York become the most skilful thieves. In the George Junior Republic, as we have seen, these same boys grow into the best citizens. Here environment is created and chosen by society for the boys; where it appoints them to a slum environment it produces thieves and criminals; where it gives them a rational environment out of the same material it produces first-class types.

Now society may fail to choose for itself the highest goal, which is nothing but failure to select the largest environment to which to adapt itself. It has the choice of various inferior lines of growth. Then "practical" education will aim to fit the individual for most perfect adaptation to the inferior plane chosen. *Man has largely inherited the animal method and only partially adopted the human.* Nature has provided education for animals only in a state of stability. For change, improvement, nature has provided animals with nothing that can be called a method, for the means it uses is destruction—destruction for all who do not conform to the needs of the change, and in working out a new adaptation, the destruction of all who stray extends over an immense period before a new state of stability is established with a new instinct to conserve it. Now this is an incredibly blundering and costly method where the individual is of any account and where the goal is of value, both of which conditions are true of man. It meets the needs of animals because survival is the only thing aimed at, and the "fittest" are those adapted to the prevailing conditions. The inadequacy of the principle for man and education becomes evident from the fact that the conditions demanding adaptation, if ethically low, will call for and bring out men of an inferior type, and in a society of this kind the few that might seek to make their adaptation to a more universal environment, though they would be the best from the standpoint of civilization and progress, would be suppressed. But the society choosing this principle stagnates and, in the long run, retrogrades. Now the purpose of education should not be merely to fit each generation for adaptation to the grade that society may happen to hold at that time, but to create in men the habit of discriminating and of choosing that which leads to something higher.

Swift, Edgar James, *The Mind in the Making* (New York, Scribner, 1909), pp. 320-322.

255

Influence of Books and Newspapers on Behavior

Many times the influence of a book on the behavior of a group is quite direct as in the case of the "Penrod and Sam" gang, but so many stories are made into picture plays nowadays that it is very difficult to separate the influence of these two factors.

Patterns of behavior presented in the newspapers are followed in much the same way as those that appear in the movies and in books; yet such imitation does not ordinarily come to public attention unless it involves tragedy or has sensational value. Three little boys were killed playing "Collins-in-a-Cave." The influence of the story of the suicide of . . . has been noted in two cases, one in Chicago and one in Milwaukee. In each case clippings of the . . . story were found among the possessions of the boy committing suicide.

There can be little doubt that knowledge of criminal activities and technique is often disseminated through the newspapers, many of which seem to thrive best by featuring crime news and playing it up for its last shred of emotional appeal. Such persistent featuring of crime has much the same effect in inducing imitative conduct as is produced by the constant advertising of commercial products. It seems to fire the imaginative activities of the adolescent and stimulate him to follow the pattern thus presented, enshrined as it often is in a glamorous setting of adventure and romance.

Thrasher, Frederic M., *The Gang* (University of Chicago Press, 1927), p. 111.

256

Education, Crime, and Social Progress

Now one of the few generalizations that may be drawn with reasonable confidence from the facts of history is that a civilization resting on slavery has within it the seeds of its ultimate disintegration. And there is no generalization more clearly substantiated by both history and biology than that effort and struggle and a certain measure of competition are fundamentally essential to progress. If industrialized civilization means only an expansion of leisure and luxury, its doom is sealed. If, on the other hand, it can be made the agency for lifting the great masses of people to higher levels of effort and achievement, it will constitute a forward step of unprecedented magnitude. In all history, no opportunity has been offered to any people that approximates in sweeping scope and magnificent promise the opportunity that now seems to spread out before the people of our country. . . .

Public education in our country can lay just claim to a goodly number of outstanding achievements. Its expansion both outward and upward during the past generation has been unprecedented in history and is unparalleled among contemporary peoples. It has set a new and remarkable record both in the proportion of the total population enrolled in school and in the proportion of those enrolled who are retained and advanced to the higher levels. . . .

When we come, however, to the type of educational effort represented in the general topic of this morning's program, the picture in many ways is not nearly so pleasant to contemplate. The situation involves something akin to a paradox. Among a civilized and enlightened people—and a people certainly not characterized by excessive immorality of the more sordid types—an excessive amount of lawlessness just as certainly prevails. By far the most significant problem confronting the

American people today lies in the apparent impotence of our institutions of law and justice to curb the wide prevalence of serious crime. There can be no doubt that our crime ratios are much higher than in any other comparable nation, and there is evidence that the ratios of serious crimes have been increasing over a period that has witnessed a marked and in some cases a striking decrease in serious crime in practically every nation with which we would wish to be compared. In other words, the situation that we are facing seems quite peculiar to our own country. . . .

During the past generation the forces that have operated to expand the reach and holding power of education have operated also to weaken the educational fiber, and consequently to prevent education from exerting its full potential influence against the debilitating tendencies that almost certainly go with increased material prosperity. It is obvious that the vast upward expansion of American education would have been impossible if the rigorous standards governing secondary and higher schools in other countries had not been very greatly modified here. We have been face to face with two alternatives: (1) We could limit our high schools and colleges to the few best fitted by nature and nurture to meet rigorous standards; or (2) we could open the high schools and colleges to the masses at a certain sacrifice of rigor. Consistently with our ideals of democracy we have chosen the latter course, and for one I rejoice that we have. . . .

I would say with considerable emphasis that what Rabelais called "honor" and what I call an "ingrained respect for law"—in so far as each is a dynamic force in the control of conduct—are cut psychologically from the same cloth. Both are fundamental predispositions that may be firmly fixed, "ingrained," by early training. They are not, of course, instincts, but they are products of nurture that may have quite the force of instinctive urges. . . .

The theory that educational policies and programs must necessarily shift and change with every change in the conditions of social life is very far from a sound theory. It all depends upon the nature and causes of the social change and upon the relation of these both to the educational program that has preceded and to the program that is proposed to meet the new demands which the social change is alleged to have brought about. . . .

For thirty years past, the public schools of the United States have taken their ideals in ever-increasing measure from a group of private schools which have attempted more or less consistently to follow the so-called Progressive theory of education. Some of these schools have adopted the name "experimental," either in recognition of their belief that they are initiating new practices or because they have wished to emphasize the difference between them and schools of the more rigorous type. In so far as the writer is aware, none of these schools has been experimental in the scientific sense; that is, none of them has provided for the testing of different procedures under rigidly controlled conditions. Generally speaking, each has set out to demonstrate a theory by putting it into practice rather than to determine its validity by comparing its results in practice with the results of rival theories. These schools at their best have been demonstration schools; at their worst, they have been exploitation schools. . . .

The contrast between the Progressive theories and what I may call the Stalwart doctrines is nowhere so sharply defined as in their respective attitudes toward system and order. The Stalwart makes systematic and orderly progress the central feature of his educational program. The Progressive recognizes system, if at all, only with averted face. In his program, all learning will await as far as possible the opportunity presented by the emergence in the learner's life of a vital problem of a "real" purpose which the learning will solve or satisfy. To the Progressive, the following of a definite program arranged with due regard to logical sequence, and divided into convenient learning units, is a wholly artificial process. . . .

To all intents and purposes, then, the prevailing American theory of education not only accepts freedom as an end of education, but in its postulates encourages the inference that freedom is the ideal means of attaining this end. . . .

I may summarize the principle theses of my argument as follows:

1. Disciplined freedom is an outstanding objective of the educative process.

2. Desirable freedom means not only freedom from unjust restraints imposed by others, but also freedom from the repressive and depressive influences of want, fear, error, fraud, and superstition.

3. For the individual as for the race, true freedom is always a conquest, never a gift.

4. The means of achieving freedom can best be connoted by the virile term "discipline"; any term less virile is inconsistent with the supreme importance of the ends sought.

5. Externally imposed discipline is inevitably the basis of self-discipline, and should give way to the latter whenever the capacity for intelligent and effective self-guidance has been achieved.

BAGLEY, WILLIAM C., *Education, Crime, and Social Progress* (New York, Macmillan, 1932), pp. 6, 15, 20, 31, 56, 70, 87, 91, 104, 111.

CHAPTER XI

Will in Education

THE material in this chapter deals with the subject of will as a factor in education. The selection from Horne (257) gives the meaning of will as used in the chapter. The selection from Perry (258) shows that there is freedom from the exclusive control of mechanical laws, and that, in a certain sense, the control of life by moral laws takes precedence of its control by mechanical laws. Dewey and Tufts (259) give justification for considering physical heredity, social heredity, and effort, or will, as the sources of man's power.

The entire chapter should be read carefully. It represents a type of philosophy which is probably not emphasized as much as it should be in present-day educational theory. The quotations (260 and 281) from the great biologist Conklin deserve special attention.

257

Meaning of Will in Education

By "will" in this connection we mean the part the individual himself plays in his own making and in the making of society. Our preceding discussions have regarded men and women as products,—products of heredity and environment; we have now to regard them as producing,—producing to a degree both themselves and others. Hitherto we have lost sight of the man himself we were seeking to make; now we have to recognize him as contributing to his own making. The term "individuality" would thus be a synonym for "will" as one of the three elemental processes in man-making. Especially are we to avoid the idea that "the will" is "a faculty" of mind distinct from other so-called "faculties," such as intellect, memory, reason, and emotion. All the functions of consciousness are interrelated; they constitute one organic unity, one conscious personality, and "the will" is the name for the fact that consciousness is an agent. Consciousness is a knowing, sensitive agent. It is this agency phase of consciousness that constitutes our unique individuality; we are individuated in space by our bodies, in character by our purposes and deeds. Knowledge may be shared; one's deed remains his very own. Thus it is the active aspect of consciousness that we call "will," and it is this will which constitutes our individuality, and it is this individuality whose influence in man-making we are now to consider.

It may help some in this preliminary classification of terms to distinguish "personality" from "individuality." The person is the complete consciousness, including the various cognitive, emotive, and motive phases; the individuality is the motive or will phase of the person. Personality is a concrete term; individuality is an abstract term. In common usage the terms "person" and "individual" are synonymous, but by "individuality" one means particularly the purposes, deeds, and character of the person. . . .

It is through will that we develop or neglect the capacity bestowed by heredity. A gifted person may idle away his time; an average person may improve himself as best he can. It is for the man himself to say whether he will strive to be all that Nature intended him to be or not. A capacity undeveloped is as fruitless as no capacity at all, as a seed unsown is as barren as a dead seed. It is by will that we realize capacities, that we neglect opportunities, that we choose to be or not to be what our inherent potentialities allow. . . .

Within the limitations of inherited capacities and environing opportunities, man becomes what he will. This is the long-sought answer to our fundamental question as to the relative place of will in man-making. It clearly means that we cannot become what we will; it equally means that, given certain limits, within these we can become what we will. We cannot by willing enlarge our boundaries; we can by willing cultivate and improve our soil. We cannot by willing enlarge our capacities, but only develop them. We cannot by willing create opportunities, but only utilize them and help them arise.

Thoughts then lead to deeds and deeds through repetition lead to habits, and our habits taken together are our character, and our character leads by cause and effect to our destiny. Character is what we are; destiny is what we are becoming; it is not fixed for each individual, but is in process of being fixed by himself in relation to his inheritance and his circumstances. The trouble is not in our stars, but in ourselves, if we are total failures; partial failures may be blamed on heredity or circumstance. Where there is no will there is no way, however great the capacity, however inviting the opportunity. Even where there is a will, heredity may have blocked the way. These are the links in the chain of life from simplest beginning in thought to sublimest conclusion or utmost failure in destiny. And we have power over our thoughts.

HORNE, HERMAN HARRELL, *Idealism in Education* (New York, Macmillan, 1923), pp. 96, 97, 119, 120, 122-124.

258

Freedom Positive and Negative

There is sufficient ground, then, in reason and in fact, for asserting *that interests operate,* that things take place because of the good they promote. And this, I think, is the meaning of freedom, both as an actuality and as a prerogative. I can and do, within limits, act as I will. Action, in other words, is in a measure governed by desires and intentions. And this measure is capable of being increased, as knowledge, skill, and co-operation develop. There is even a possibility and prospect of its increase to a point at which values shall enter into possession of the world at large, as they have already come to possess it in part.

There is also a negative freedom. There is freedom from the exclusive control of mechanical laws. Indeed, it may be said that, in a certain sense, the control of life by moral laws takes precedence of its control by mechanical laws. For the unit of life, the animal and human individual, is a moral and not a mechanical constant. An individual life is distinguished by what it seeks to preserve and promote. It is disjoined from the special and material continuum in which it is immersed, by its partiality, by the specific bias and preference which animate it. It may even be said that in a measure life is independent of mechanism. For if an individual life is defined by its interests, then it will be identified with a physical environment to just the extent, and no more, that its interests are physical. If any life can be said to consist of interests that are independent of the spacial and temporal juxtaposition of things, if its interests can be said to be capable of realization under other circumstances and through other means, then there is ground for saying that such an individual life is non-physical, and not *necessarily* bound up with the fortunes of the body.

There is also a freedom from the control of social or cosmic *moral* laws. There is a sense in which every individual is morally a law unto himself. This means only that his action cannot be explained altogether by the larger purposes which embrace him along with others. That there are such larger purposes, and that they are effectual, will not, I think, be disputed by anyone who admits that purposes are effectual at all. But social purposes grow out of individual purposes, and never wholly assimilate them. It is no more possible to explain a man's action fully in terms of the motives which actuate a social aggregate, than it is possible to explain any physical event wholly in terms of the laws, if there be such, that determine all physical events. The pluralistic character of the universe is reflected in life. Interests, like other things, are more or less bound together. Indeed, in this case, unity is more an advantage to be sought, than a necessity to be deprecated.

PERRY, RALPH BARTON, *Present Philosophical Tendencies* (New York, Longmans, 1929), pp. 342-344.

259

Sources of Man's Power

A man's power is due (1) to physical heredity; (2) to social heredity, including care, education, and the stock of inventions, information, and institutions which enables him to be more efficient than the savage; and finally (3) to his own efforts. Individualism may properly claim this third factor. It is just to treat men unequally so far as their efforts are unequal.

Dewey, John, and Tufts, James H., *Ethics* (New York, Holt, 1908), pp. 548-549.

260

Our Unused Talents

Will is indeed the supreme human faculty, the whole mind in action, the internal stimulus which may call forth all the capacities and powers. And yet the will does not directly create nor even discover these powers; they are produced by the factors of development, by heredity, environment and training; and they are usually discovered by accident or under the stress of necessity. How often have we surprised ourselves by doing some unusual or prodigious task! What we have done we feel that we can do again. We realize more or less clearly, depending upon our experience, that what we habitually do is far less than we could do. It is this reserve, upon which we can draw on special occasions, that gives us the sense of freedom.

In his inspiring address on "The Energies of Men" William James showed that we have reservoirs of power which we rarely tap, great energies upon which we seldom draw, and that we habitually live upon a level which is far below that which we might occupy. Darwin held the opinion, as the result of a lifetime of observation, that men differ less in capacity than in zeal and determination to utilize the powers which they have. In playful comment on the variety and extent of his own life work he said in modest and homely phrase, "It's dogged as does it." It may be objected that the zeal and determination were inherited, but here also the hereditary possibilities become actualities only as the result of use, training, the formation of habits.

It is generally admitted that no constant distinction can be recognized between the brain of a philosopher and that of many a peasant. Neither size nor weight of brain nor complexity of convolutions bears any constant relation to ignorance or intelligence, though doubtless an "unlimited microscopist" could find differences between the trained and the untrained mind. The Brains of Beethoven, Gauss and Cuvier, although unusually large, have been matched in size and visible complexity by the brains of unknown and unlearned persons—persons who were richly endowed by nature but who had never learned to use their talents. In all men the capacity for intellectual development is probably much greater than the actuality. The parable of the talents expresses a profound biological truth, men differ in hereditary endowments, one receives ten talents and another receives but one; but the used talent increases many fold, the unused remains unchanged and undeveloped. Happy is he who is compelled to use his talents; thrice happy he who has learned how to compel himself! We shall not live to see the day when human inheritance is greatly improved, though that time will doubtless come, but in the meantime we may console ourselves by the thought that we have many half-used talents, many latent capacities, and although we may not be able to add to our inheritance new territory we may greatly improve that which we have.

Jennings has pointed out as one of the great tragedies of life the almost infinite slaughter of potential personalities in the form of germ cells which never develop. A more dreadful though less universal tragedy is the loss of real personalities who have all the native endowments of genius and leadership but who for lack of proper environmental stimuli have remained undeveloped and unknown; the "mute, inglorious Miltons" of the world; the Caesars, Napoleons, Washingtons who might have been; the Newtons, Darwins, Pasteurs who were ready formed by nature but who never discovered themselves. One shudders to think how narrowly Newton escaped being an unknown farmer, or Faraday an obscure bookbinder, or Pasteur a provincial tanner. In the history of the world there must have been many men of equal native endowments who missed the slender chance which came to these. We form the habit of thinking of great men as having appeared only at long intervals, and yet we know that great crises always discover great men. What does this mean but that the men are ready formed and that it requires only this extra stimulus to call them forth? To most of us heredity has been kind—kinder than we know. The possibilities within us are great but they rarely come to full epiphany.

Conklin, Edwin G., *Heredity and Environment* (Princeton, Princeton University Press, 1922), pp. 333-335.

261

The Individual a Factor in What He Becomes

Wherever we find a rough agreement, as in the case of pugnacity, between social demands and the counsels of individual experience, one suspects a causal connection. The individual result may be the cause of the social standard; but it is also possible that the social rule may be the cause of the individual attitude. In view of the strong reasons for regarding the individual, his experience and his habits, as products primarily of society, let me dwell briefly on our main thesis, that the individual will has an independent course of growth, a *direction of its own.*

Everything an individual becomes, every habit he acquires, will bear the mark of *all* the forces that have been steadily at work upon him. We say that his will has its bent, and that whatever his mind becomes will show the trace of it: this does not exclude the fact that society also leaves its mark on every developed trait. Hence one who sees that the social effect is *everywhere* may easily leap to the conclusion that it is *everything:* and that the individual is a mere term in a social process. . . .

But does all this mean that the individual will is not *also* a factor in what it becomes? Does it mean that society can so much as impose upon it a single habit without its own consent and conspiracy? Certainly not.

For the original instinct of the individual is not a directionless *élan vital:* it has a native trend which shows itself in its reactions upon custom. It relies on custom, or some sort of social suggestion, to set its habits in motion; but it receives all custom *tentatively* as an hypothesis in its own dialectic, the mental after-image of every such performance of adoption or imitation is *its own,* and the consequent modification is its own. For note that custom is never adopted without change: hence the social process is not precisely circular. Custom which is taken up into the individual will and reissued as habit bears the marks of the issuer: it is now "his" habit, no longer "society's" custom. Hence customs are perpetually being readjusted to the will, and not alone the will to custom. "Impulses are the pivots upon which the re-organization of activities turns; they are the agencies of deviation, for giving new directions to old habits and changing their quality"; and that which thus gives direction cannot conceivably be a directionless force.

Hocking, William E., *Human Nature and Its Remaking* (New Haven, Yale University Press, 1932), pp. 191-194.

262

Man Makes His Character and Condition

Every one of us, with God's help and within the narrow limits of human capability, himself makes his own disposition, character and permanent condition.

Souvestre, Emile, *An Attic Philosopher in Paris* (New York, Burt, no date), p. 181.

263

Heredity, Environment, and Will in Education

I believe that the fundamental method of improving the human race is by the right mating of life partners, and that education, in home and school, through the instruction of the young, can help enlighten public opinion so that the laws of heredity may be utilized for racial improvement.

I believe that environment is important in providing opportunity for inherited capacities to realize themselves and that education, through the application of knowledge, can assist the community in providing the best environment for the young generation.

I believe that the will of the individual as the practical function of consciousness is important in determining the attitude of the person toward his inherited capacities and environing opportunities, and that education, in home and school, by indirect and direct means, can assist in the formation of the right will.

I believe, in short, that the great secondary causes which make men and women are heredity, environment, and will as they are used by the First Cause, and that education is a mighty co-operating agent with each of these secondary forces.

Horne, Herman Harrell, *This New Education* (New York, Abingdon, 1931), pp. 50-51.

264

Volition Conforms to Laws of Psychic Action

Will is ordinarily spoken of as if it were an entity, a something which compels us to follow some line of action rather than another. . . .

A little reflection ought to convince us, however, that the will is not a separate and transcendental entity, but that all volition conforms to universal laws of psychic action. . . . The mind is not a sum of separate faculties each of which functions independently of the others. There is no feeling without some accompanying knowledge; no intellectual activity without some feeling-tone. . . . Likewise there is no such thing as pure volition without some feeling and some intellection. Why do we will? Because we desire something. Why do we desire it? Because we have knowledge of it, and it seems to possess some worth for us, because we have had experiences which have left tendencies toward the particular action. We give it our attention which is the same thing as choosing or selecting it.

Bolton, Frederick E., *Principles of Education* (New York, Scribner, 1910), pp. 705-706.

265

The Goal of Will

The goal at which the will of every living creature aims is the normal exercise of the vital functions which constitute its nature. Every animal desires to live the life for which it is predisposed. Its natural disposition manifests itself in impulses, and determines its activity. The formula may also be applied to man. He desires to live a human life and all that is implied in it; that is, a mental, historical life, in which there is room for the exercise of all human, mental powers and virtues. He desires to play and to learn, to work and to acquire wealth, to possess and to enjoy, to form and to create; he desires to love and to admire, to obey and to rule, to fight and to win, to make poetry and dream, to think and to investigate. And he desires to do all these things in their natural order of development, as life provides them. He desires to experience the relations of the child to its parents, of the pupil to his teacher, of the apprentice to the master; and his will, for the time being, finds the highest satisfaction in such a life. He desires to live as a brother among brothers, as a friend among friends, as a companion among companions, as a citizen among citizens, and also to prove himself an enemy among enemies. Finally, he desires to experience what the lover, husband, and father experiences,—he desires to rear and educate children who shall preserve and transmit the contents of his own life.

Paulsen, Friedrich, *System of Ethics* (translated by Thilly; New York, Scribner, 1899), p. 270.

266

Moral Man the Effect of Will

What man is or ought to be in a moral sense he must make or must have made *himself*. Both must be the effect of his free elective will, otherwise it could not be imputed to him, and, consequently, he would be *morally* neither good nor bad. When it is said he is created good, that can only mean that he is created for *good*, and the original *constitution* in man is good; but this does not yet make the man himself good, but according as he does or does not adopt into his maxim the springs which this constitution contains . . . he makes himself good or bad.

KANT, IMMANUEL, *Critique of Practical Reason* (London, Longmans, 1927), p. 352.

267

Inheritance, Environment, and Will

The mechanism of thought and feeling is set in motion, and is thereby modified, by stimuli that spring from three sources; inheritance, environment, will. To gauge the respective power of these stimuli is a difficult or impossible task. Sometimes more stress is laid upon one, and then again upon another. Formerly the native energy of the man was mainly considered. Those who have been trained in metaphysical habits of thought have commonly enthroned the will as king of life. But of late, owing, perhaps, to the greater growth of scientific than of philosophical studies, inheritance and environment have come quite to overshadow the will,—nay, almost to obscure it. Physical nature holds a great place in some current theories of man and of life. Montesquieu led the way in his doctrine of climates, expounded in "The Spirit of Laws," and he has had a numerous and powerful following. The exaggerated part that Buckle assigned to physical nature in general history, and Taine in intellectual history, is well known to all readers of the "History of Civilization in England," and of the "History of English Literature." In the words of Ribot, "Great stress has recently been laid on the influence of the physical environment. It has been shown how the climate, the air, the character of the soil, the diet, the nature of the food and drink—all that in physiology is comprised under the technical terms *circumfusa, ingesta*, etc.—shape the human organism by their incessant action; how those latent, silent sensations which do not come into consciousness, but still are ever thronging the nerves of sense, eventually form that habitual mode of the constitution which we call temperament." These speculations open up a large field to inquiry. But no theory of man is true that makes him a cornstalk or a pineapple; he is not the creature of *circumfusa*. Environment cannot obliterate heredity or reduce the will to zero. A true theory must be large enough to hold all these causes. The will is the regnant power of the soul. It modifies inheritance and changes environment. It stretches forth its sceptre over the field of human action. Still it is not omnipotent; there are metes and bounds that it cannot pass. The popular saying, "Where there is a will there is a way," is a strong rhetorical exaggeration of a great truth. This is not the place to enlarge upon the theme; but the training of the will and of the sensibility calls for renewed and enlarged attention at the hands of educators.

HINSDALE, BURKE A., *Schools and Studies* (Boston, Osgood, 1884), pp. 30-31.

268

Meaning and Importance of Will

In the stricter and narrower sense will means only that activity which is under the complete control and direction of the rational powers. It is the faculty of deliberate and ideational action, wherein the end of the action is foreseen and intended, the agent identifying himself with that end, and putting forth his active powers to realize it. In the wider and less accurate sense, will may be defined as including the entire life of expression, or the sum-total of the outgoing tendencies, including all impulses, instincts and reflexes, in so far as they issue, or tend to issue, in movements of the muscles, direction of the intellectual life, or control of the feelings.

No satisfactory account of will in the former of these two senses can be given by itself alone. For the activity of will, as deliberate and reasoned action, has its roots and the conditions of its possibility in all those unreasoned elements of the total psychic life which are included in the latter use of the term. The psychology of the will, therefore, is a broad term, and should include a full account of all the psychic and neural conditions (many of them deeply embedded in the subconscious or the unconscious life) upon which will in the stricter sense depends for its raw materials as well as for the native forces which it has to control, direct, and co-ordinate, in harmony with the ideas of reason and in pursuance of its ends.

The importance of the will, understood as the total reaction of the individual to the forces that play upon him from the environment, and to the influences that come from his instinctive and impulsive tendencies within, is recognized with special fulness by the psychology of our day. It is perceived that the intellect by itself would forever remain inert and sterile apart from the will; or rather, that the energy and fertility of the intellect is due to the fact that in its operations, as they result in knowledge, the essential thing is the active work of the mind, through which it subdues to itself the scattered data of sense, reducing them to the unity of its own apperceptive synthesis; and this is essentially an activity of will. In the act of cognition will is involved. Judgment, the essential form of all knowledge activity, always embodies a focus and a synthesis. In any judgment, A is B, the subject A represents the point where the cognitive act focuses, while the predicate B represents some idea which is united with A in the judgment act. The judgment, then, is essentially an act. So with all the processes of the mind. They all alike represent, each in its own way, the activity of the mind, and this activity is will. The will is not an entity or a faculty standing by itself, and co-ordinate with the other faculties of the mind, as we have already pointed out, but one of the essential features or characteristics of the totality of the life of mind.

Tracy, Frederick, *The Psychology of Adolescence* (New York, Macmillan, 1920), pp. 101, 103.

269

The Function and Importance of Will

By the function of the will we mean the purpose that it serves, its utility to the organism. This function in the case of the will seems to be to provide the organism with a means of adjustment to its environment. The means is in most general terms the response of the organism to its stimuli. Through the senses the world acts on the organism, through the muscles the organism reacts on the world. The will is the reagent of consciousness. So far it is evident that without the function which will contributes, man would be an automatic machine, but not a person.

The importance of the will in individual and social life follows from its function, and may be indicated in the following ways. In the individual, the will is the source of achievement and character; it keeps the intellect at work or lets it idle; it keeps passion and unseemly emotions in subjection or lets them overwhelm us; it realizes the capacity which nature through heredity bestows, or wraps it in a napkin; it improves the opportunity which environment allows, or fatally neglects it; it stems the current of adverse circumstance, or drifts indifferently to an alien port. This in the individual.

In society the will is the responsible agent for custom, morals, law, constitutions, and history; in the form of what Schopenhauer called "the will to live," of what Darwin called "the struggle for existence," of what common usage calls "the instinct of self-preservation," or "nature's first law," the will keeps society in existence.

Everywhere—in the individual, in society, in nature, in reality as embracing all—that there is movement, philosophy would probably find signs of will, regarding all temporal changes as fulfilments of an Absolute Will. The parts seeking their adjustment to each other within the whole, this is the function and importance of will.

HORNE, HERMAN HARRELL, *The Psychological Principles of Education* (New York, Macmillan, 1915), pp. 261-262.

270

Self-Determination

In a narrower sense we mean by practical education the methodical development of the will. . . . The will is already the subject of a science of its own, i.e., of ethics; and if the science of education would proceed in anywise scientifically, it must recognize and presuppose the idea and the existence of this science. It should not restate in full the doctrines of freedom, of duty, of virtue, and of conscience, although we have often seen this done in works of education. Education has to deal with ideas of freedom and morality only so far as to fix the technique of their process and at the same time to confess itself weakest just here, when nothing is of any worth without pure self-determination.

Rosenkranz, Karl, *Philosophy of Education* (New York, Appleton, 1907), pp. 141-142.

271

Freedom and Ideals

The first and probably the most fundamental problem connected with the realization of ideals is that of human freedom. Apart from any formal definition or analysis of freedom, all will agree that an act of intelligent choice may properly be called a free act. Now, without free acts in this sense, rational ideals can neither be formed nor appropriated nor realized. It is true that the ideals of primitive man are often mere group imitation of involuntary behavior or of accidental events. But depth-effects cannot be wholly involuntary, for where the will is not involved the full depth of human nature has not been stirred. The will need not be regarded as the creator of ideals; but without a free act of acknowledgment no ideal can become my ideal. Logical thought does not occur in minds which do not choose to think. Bowne has pointed out more clearly than anybody else the fact that without freedom the possibility of arriving at any distinction between truth and error is blotted out.

Freedom is thus essential to the formation of valid ideals; how much more obviously is it necessary to their realization! To carry out an ideal it is necessary to guide a long series of acts so that it will conform to the approved type. This implies a purpose freely chosen and freely sustained; the free choice of means to its attainment; and free will to criticize every stage of achievement in the light of the chosen ideal.

Brightman, Edgar Sheffield, *A Philosophy of Ideals* (New York, Holt, 1928), p. 84.

272

Importance of Training the Will

This training of the will is the most important part of education, is indeed education itself; and its chief purpose is that the animal side of us may be kept in subjection, that greed, selfishness and sensuality, which are natural to us, may not get the upper hand of friendliness, unselfishness and self-respect, which are also natural to us. But a secondary and almost equally important outcome of the discipline of the will is in the training of judgment, in accustoming us to make sound decisions, in getting us into the habit of doing nothing upon impulse but only after careful thought and due weighing of results. Training in self-control, therefore, is the best sort of intellectual training; and because this is so, the home, where the will is trained, is also the place where, mainly, the mind should get its discipline. The school exists primarily to impart information and to give social experience; in the home must be prepared a mind fit to take in and utilize that information and so trained in judgment as to profit by the special forms of discipline given by the school.

Munroe, James P., *The Human Factor in Education* (New York, Macmillan, 1921), p. 88.

273

Choice a Necessity

I am often confronted by the necessity of standing by one of my empirical selves and relinquishing the rest. Not that I would not, if I could, be both handsome and fat and well dressed, and a great athlete, and make a million a year, be a wit, a *bon-vivant,* and a lady-killer, as well as a philosopher; a philanthropist, statesman, warrior, and African explorer, as well as a "tone poet" and saint. But the thing is simply impossible. The millionaire's work would run counter to the saint's; the *bon-vivant* and the philanthropist would trip each other up; and the philosopher and the lady-killer could not well keep house in the same tenement of clay. Such different characters may conceivably at the outset of life be alike possible to a man. But to make any one of them actual, the rest must more or less be suppressed. So the seeker of his truest, strongest, deepest self must review the list carefully, and pick out the one on which to stake his salvation.

James, William, *Principles of Psychology* (New York, Holt, 1899), Vol. I, pp. 309-310.

274

Emancipation

In the new evaluation of life which is now taking place, there is much unwisdom and harmful sentimentality in the talk about the "emancipation" of children and young persons. That is the object of all education—genuinely to emancipate them—to bring them to the point where they can order their own lives and make them the expression of their own intelligent will, but it is the height of unwisdom to declare prematurely that this has been accomplished.

Henderson, Charles H., *What Is It to Be Educated?* (New York, Houghton Mifflin, 1914), p. 396.

275

Action Is Dependent on Ideas

But we must now close in a little more closely on this matter of the education of the will. Your task is to build up a *character* in your pupils; and a character, as I have so often said, consists in an organized set of habits of reaction. Now of what do such habits of reaction themselves consist? They consist of tendencies to act characteristically when certain ideas possess us, and to refrain characteristically when possessed by other ideas.

Our volitional habits depend, then, first, on what the stock of ideas is which we have; and second, on the habitual coupling of the several ideas with action or inaction respectively. How is it when an alternative is presented to you for choice, and you are uncertain what you ought to do? You first hesitate, and then you deliberate. And in what does your deliberation consist? It consists in trying to apperceive the case successively by a number of different ideas, which seem to fit it more or less, until at last you hit on one which seems to fit it exactly. If that be an idea which is a customary forerunner of action in you, which enters into one of your maxims of positive behavior, your hesitation ceases, and you act immediately. If, on the other hand, it be an idea which carries inaction as its habitual result, if it ally itself with *prohibition,* then you unhesitatingly refrain. The problem is, you see, to find the right idea or conception for the case.

James, William, *Talks to Teachers* (New York, Holt, 1912), pp. 184-185.

276

Independence in Action

Whoso would be a man, must be a nonconformist. He who would gather immortal palms must not be hindered by the name of goodness, but must explore if it be goodness. Nothing is at last sacred but the integrity of our mind. . . .

The objection to conforming to usages that have become dead to you is that it scatters your force. It loses you time and blurs the impression of your character.

Emerson, Ralph Waldo, *Essays and Addresses* (Lake English Classics, Heydrick, editor; Chicago, Scott, 1919), pp. 62, 65.

277

The Will Sums Up What a Man Is

Education, rationally conceived, is not at all the haphazard process which it is commonly thought to be, and commonly in practice made to be. It is the definite working out of perfectly definite fundamental principles. Life after college, from twenty-one on, is to be of the same definite character. It is to be an affirmation of the will. The will sums up what a man is, with so much of reason, religion, education, intuition, as he has gathered from his contemporaries and his ancestors.

Henderson, Charles H., *What Is It to Be Educated?* (New York, Houghton Mifflin, 1914), p. 376.

278

The Scroll, Heredity; the Gate, Environment

It matters not how strait the gate,
How charged with punishments the scroll,
I am the master of my fate:
I am the captain of my soul.

Henley, William E., *Echoes of Life and Death* (London, Macmillan, 1926).

279

The Proper Function of the Will

It is the proper function of the will to dominate the personal life, in spite of grief or pain or outward disaster, and to come off victorious against any and all odds. Those who know life know that the will is capable of doing this.

It is an inner peace, clear and intelligible to its possessor, because it is the result of an assured inner harmony, but passing all understanding on the part of those who see its operation, but do not know its source. This immense assurance, this amazing audacity are not poses, as an uninformed world is prone to misthink them, but a logical and necessary outcome of that view of life which is the spiritual heart of education. In the absence of even the possibility of disaster, it is incredible that one should be timid, or otherwise than serene.

HENDERSON, CHARLES H., *What Is It to Be Educated?* (New York, Houghton Mifflin, 1914), pp. 410-412.

280

The Human Creature Must Finish Himself

As to structure, human nature is undoubtedly the most plastic part of the living world, the most adaptable, the most educable. Of all animals, it is man in whom heredity counts for least, and conscious building forces for most. Consider that his infancy is longest, his instincts less fixed, his brain most unfinished at birth, his powers of habit-making and habit-changing most marked, his susceptibility to social impressions keenest,—and it becomes clear that in every way nature, as a prescriptive power, has provided in him for her own displacement. Having provided the raw material, nature now charters man to complete the work and make of himself what he will. His major instincts and passions first appear on the scene not as controlling forces, but as elements of play, to be tried in a thousand modes and contexts and admitted but slowly to the status of settled habit in forms chosen by the player. Other creatures nature could largely finish: the human creature must finish himself.

HOCKING, WILLIAM E., *Human Nature and Its Remaking* (New Haven, Yale University Press, 1923), pp. 15-16.

281

Self Discovery and Self Control

What is needed in education more than anything else is some means or system which will train the powers of self discovery and self control. Easy lives and so-called "good environment" will not arouse the dormant powers. It usually takes the stress and strain of hard necessity to make us acquainted with our hidden selves, to rouse the sleeping giant within us. How often is it said that the worthless sons of worthy parents are mysteries; with the best of heredity and environment they amount to nothing, whereas the sons of poor and ignorant farmers, blacksmiths, tanners and backwoodsmen, with few opportunities and with many hardships and disadvantages, become world figures. Probably the inheritance in these last named cases was no better than in the former, but the environment was better. "Good environment" usually means easy, pleasant, refined surroundings, "all the opportunities that money can buy," but little responsibility and none of that self discipline which reveals the hidden powers and which alone should be counted good environment. Many schools and colleges are making the same mistake as the fond parents; luxury, soft living, irresponsibility are not only allowed, but are encouraged and endowed—and by such means it is hoped to bring out that in men which can only be born in travail.

The chief educational value of athletics is found in this that it teaches self control. But in great athletic contests the self control of the spectators is usually inversely proportional to that of the players, and while excess of stimuli may lead to wholesome and beneficial reactions in the players it frequently leads to excess of stimulants and to other injurious reactions in the spectators. But college athletics has this much at least in its favor, it trains men who take part in the contests to do their best, to subordinate pleasure, appetite, the desire for a good time, to one controlling purpose; it trains them to attempt what may often seem to them impossible, to crash into the line though it may seem a stone wall, to get out of their bodies every ounce of strength and endurance which they possess.

Such training makes men acquainted with their powers and teaches courage, confidence and responsibility. If only we could make young persons acquainted in some similar way with their hidden mental and moral powers what a race of men and women might we not have without waiting for that uncertain day when the inheritance of the race will be improved! Whatever the stimulus required, whether pride or shame, fear or favor, ambition or loyalty, responsibility or necessity, education should utilize each and all of these to teach men self knowledge and self control.

But it will be said that self control depends upon inheritance, that strong wills and weak wills are such because of heredity. It is true that one man may be born with a potentiality for self control which another man lacks, but in all men this potentiality becomes actuality only through development, one of the principal factors of which is use or functional activity. An amazing number of persons have but little self control. Is this always due to defective inheritance, or is it not frequently the result of bad habits, of arrested development? To charge defects at once to heredity removes them from any possible control, helps to make men irresponsible, excuses them for making the least of their endowments. To hold that everything has been predetermined, that nothing is self determined, that all our traits and acts are fixed beyond the possibility of change is an enervating philosophy and is not good science, for it does not accord with the evidence. It is amazing that men whose daily lives contradict this paralyzing philosophy still hold it, as it were, in some water-tight compartment of the brain, while in all the other parts of their being their acts proclaim that they believe in their powers of self control: they set themselves hard tasks, they overcome great difficulties, they work until it hurts, until they can say with Johannes Müller, *Es klebt Blut an der Arbeit,* and yet in the philosophical compartment of their minds they can say that it was predetermined in heredity and from the foundations of the world.

Whether all the phenomena of life and of mind can be explained on the basis of a purely mechanistic hypothesis or not, that hypothesis must square with the facts and not the facts with the hypothesis. It has always been true of those who "sat apart and reasoned high of fate, free will, foreknowledge absolute" that they have "found no end in wandering mazes lost." Whatever the way out of these mazes may be,—whether it be found in the varied responses of an organism to the same stimulus, to the introduction of memory, intelligence and reason as internal stimuli, or to some form of idealism which finds necessity not in nature but in the spectator, and freedom not in the spectator but in the agent,—it is true for those who do not "sit apart and reason high," but who deal merely with evident phenomena, that the way of escape is not to be found in denying the reality of inhibition, will and self control. Because we can find no place in our philosophy and logic for self determination shall we cease to be scientists and close our eyes to the evidence? The first duty of science is to appeal to fact and to settle later with logic and philosophy. Is it not a fact that the possibilities of our inheritance depend for their realization upon development, one of the most important factors of which is use, functional activity in response to stimuli? Is it not a fact that in many animals behavior is modifiable and that impulses may be inhibited and controlled? Is it not a fact that experience, intelligence, will are factors in human behavior and that by means of these men are often able to choose between alternatives and so to control their own activities as well as external phenomena? Is it not a fact that our capacities are very much greater than our habitual demands upon them? Is it not a fact that belief in our responsibility energizes our lives and gives vigor to our mental and moral fiber? Is it not a fact that shifting all responsibility from men to their heredity or to that part of their environment which is beyond their control helps to make them irresponsible?

This debilitating philosophy in which everything is predetermined, in which there is no possibility of change or control, in which there is hypertrophy of intellect and atrophy of will, is a symptom of senility whether in men or nations. We need to return to the joys of a childhood age in which men believed themselves free to do, to think, to strive, in which life was full of high endeavor and the world was crowded with great emprise. We need to think of the possibilities of development as well as of the limitations of heredity. Chance, heredity, environment have settled many things for us; we are hedged about by bounds which we cannot pass, but those bounds are not so narrow as we are sometimes taught, and within them we have a considerable degree of freedom and responsibility.

> "That which we are we are,
> One equal temper of heroic hearts
> Made weak by time and fate, but strong in will
> To strive, to seek, to find, and not to yield."

Conklin, Edwin G., *Heredity and Environment* (Princeton, Princeton University Press, 1922), pp. 335-338.

CHAPTER XII

Education and Social Progress

THE selections in this chapter deal with the subject of education in its relation to social progress. Whitehead (282) emphasizes the fact that trained intelligence is essential to a nation's life. Perry (283) gives timely warning with reference to a tendency only too common now of accepting almost any theory simply because it is new. He is no doubt right in saying that theory must correct and enlighten belief, but that it can not, consistently with the conduct of any considerable enterprise, replace belief. A degree of social stability is a necessary condition for normal social progress. Todd (284) calls attention to the fact that education is but one of many elements involved in social progress. Finney (293) shows his faith in education as a social force by referring to the school as the steering gear of a democratic society. Throughout the chapter various views are presented to the student for consideration. Selections 294, 305, 307, 308, 309, and 310 should be read with special care.

282

The Race Which Does Not Value Trained Intelligence Is Doomed

When one considers in its length and in its breadth the importance of this question of the education of a nation's young, the broken lives, the defeated hopes, the national failures, which result from the frivolous inertia with which it is treated, it is difficult to restrain within oneself a savage rage. In the conditions of modern life the rule is absolute, the race which does not value trained intelligence is doomed. Not all your heroism, not all your social charm, not all your wit, not all your victories on land or at sea, can move back the finger of fate. To-day we maintain ourselves. To-morrow science will have moved forward yet one more step, and there will be no appeal from the judgment which will then be pronounced on the uneducated.

WHITEHEAD, ALFRED NORTH, *The Aims of Education* (New York, Macmillan, 1929), pp. 22-23.

283

A New Kind of Credulity

It was once complained that men are too easily inclined to believe what their fathers believed, that men lack originality and independence. But there is now reason to fear that men may too easily believe what no one has ever believed before. Men with settled convictions may become as rare as were free-thinkers in an earlier time. And the consequences must be scarcely less detrimental to social welfare than the consequences of the earlier complacency and narrow-mindedness. For inquisitiveness and fluidity of mind, though they condition the discovery of new truth, are intolerable in society at large. Theory must correct and enlighten belief, but it cannot, consistently with the conduct of any considerable enterprise, replace belief.

PERRY, RALPH BARTON, *Present Philosophical Tendencies* (New York, Longmans, 1929), p. 20.

284

How Is Education a Social Force?

But where is the mighty agent which will bring about this conscious and well-articulated plan of social advance? Education, reply the teachers and some sociologists. Dewey speaks of the school as a fundamental means of social progress. "To an extent characteristic of no other institution, save that of the state itself, the school has power to modify the social order." Ellwood points to education as "the chief means to which society must look for all substantial social progress."

But the problem of education as a factor in social progress is not so simple as might appear. It is one thing to say with Ward that education is the paramount "social force," and quite another to claim that it is the supreme or even an important element in "progress." How, if at all, is education a social force? Does it counteract natural selection? Is it an independent force? If so, how can it be determined and measured? Can you classify "civic worth" by it? Can you measure it by statistics of crime or insanity? Or by relation to health and longevity? Or by increase of wealth and earning power in the individual or group? Or by the prevalence of general well-being and the capacity to enjoy? Or by the growth of good government and the abatement of civic nuisances? Or by cessation of war? Or increase of genius? Or increase in power to work? Or, finally, by expansion of sympathy, brotherhood, and the power to love? . . .

Social evolution and progress result from the interplay of various factors or conditioning influences, which, albeit they cannot be isolated legitimately from the total organic complex of which each is a part, may for purposes of exposition be distributed under such headings as natural environment, improvement in the arts, racial character, or development of mental outfit, but which all reduce finally to one common denominator, mind, in which the elements of desire and rational choice become gradually more distinctive and powerful. Hence progress is the result of a constant conflict of man with himself, with his natural environment, and with his social milieu (including unseen powers); in other words, is a constant balancing up of interests and desires. There is, moreover, apparently a tendency, general though painfully slow, from a predominant interest in the arts of self-maintenance through those of physical conflict and coercive association to the higher arts of intellectual culture and gratification, and finally to a more spontaneous type of association. That is to say, progress is marked by a shifting and raising of the incidence of values and by transition from a social organization wherein status and custom predominate to one characterized more by free contract and individual judgment. Or, if we follow Hegel, progress is growth in freedom. In current terminology this growth in freedom is a change in which passive adaptation to nature and instinctive subordination of individual to group becomes active control over nature and emergence of the individual, with his voluntary identification of himself and his social group as a possible next step.

Todd, Arthur J., *Theories of Social Progress* (New York, Macmillan, 1930), pp. 510, 511, 537.

285

Education and Progress

All sociologists agree that education is one of the most important factors in progress—indeed an indispensable aid to all telic progress. But when education is taken to mean, as it ought to be, not merely the dissemination of information but also the cultivation of ideals, biases, attitudes, insights, and habits, then it obviously assumes a unique role in directing the actions of men. Subtly controlled education can mould men almost at the will of those who guide it. . . .

Educators have it in their power to shape the men and women of the future almost as they will, provided that they clearly conceive their objectives and marshal subject-matter and methods in such a way as to drive on always toward these objectives. But would they, if they had a clear vision of future needs and wished to do so, be allowed to mould the boys and girls in their charge into men and women adjusted to the future situation, provided the future needed to be different from the present which adults are now approving? The present situation calls for abilities, particularly abilities to co-operate and to judge on economic questions, not needed in the same way a generation ago; so that the youth of the seventies to nineties were allowed to grow up without their acquisition, with the consequence that enterprises are now failing which might have otherwise succeeded.

Peters, Charles C., *Foundations of Educational Sociology* (New York, Macmillan, 1927), pp. 285, 288, 289; Revised Edition, 1930, pp. 398, 401-402.

286

Educating for Continued Growth

It may be stated at the outset, as the most fundamental conception of social education, that the supreme problem in this work is so to train each oncoming generation that the nation may continue to grow in strength, stability, and efficiency. This is borne in upon one with irresistible force as he surveys the ruins of ancient peoples, and as he sees that European nations, only recently leaders in all the world's activities,—intellectual, artistic, commercial,—have already entered upon their decadent period; although, since there is everywhere an awakening to the danger of degeneration, it is possible that decay may be retarded or in some cases quite successfully resisted. We need not at this point dwell at any length upon the theory current among us that nations like individuals must pass through their seven ages, from infancy to old age; but we may readily grant that as one studies the peoples of the Old World he sees clearly why men believe the doctrine. And yet there is at least one European nation that is apparently warding off old age, and possibly even regaining its youth; which phenomenon has been witnessed several times in the history of nations. There seems to be no reason in the law of things why the social organism should not be able to perpetuate itself, acquiring even greater stability with increase of years, if only it understood how to adapt each new generation to the changing conditions resulting inevitably from the evolution of the race.

O'Shea, M. V., *Social Development and Education* (Boston, Houghton Mifflin, 1909), p. 230.

287

Education Not the Transmission of a Settled Culture

Education today does not mean the transmitting of a settled culture. It is, in ways, destined to do just the reverse of this. Parent and teacher, moved by the demanding need of the new generation, must go with the young on to the frontiers of social reconstruction. There is no turning back from this task. The pressing question now is how we shall go ahead. Is there any clear way in which basic institutions are to be reconstituted? If so, what does it require of educational plan and effort?

In point of fact, there are three major ways in which different parts of the world are today seeking to answer this question. As educators we have no choice but to reckon with them. All three are being felt in America. They are bound to affect our eventual course.

The first is fascism, with its rule by dictators. Essentially conservative, usually reactionary, fascism's way out of social economic chaos is through rallying the people, chiefly the youth, to the cause of the old loyalties and virtues.

Second is liberalism, which puts its faith in the development of popular intelligence. Ideally it abhors dictatorships, and relies upon an awakened public. Gradual reconstruction and reform have been its methods of improving the lot of the people. Liberalism has been identified largely with capitalism, yet critical of it. It tends to believe that the way out of the present chaotic conditions can be achieved by improving the operation of capitalism. . . .

The third way is social-economic radicalism, represented most unequivocally by Russia. This view decries the liberal methods of democracy and believes the way out of chaos to be not through capitalism, but through a thorough-going socialism. Private profit is ruled out and the "collective" becomes the primary object and incentive of human effort.

It favors a powerful and coercive government which can bring the new plan into operation. Gradual reform is anathema. The new order, a classless society, must come through revolution in one form or another. . . .

If the educator does not take his cue from one of these three ways of bringing on a new society, he is practically bound to find and pursue some fourth alternative. What shall he do? . . .

Next Steps. There is a movement among us away from liberalism. Many educators share this effort to formulate a more definite course ahead; for the industrial society requires a culture peculiar to its own potentialities and needs. The signs of the times are clear in this particular. Education for the future in America will be an education with greatly increased definiteness of social, economic and political aims, aims which will be real and operative for this society. . . .

When this view of social reconstruction possesses the educator, it leads him in substance to say: Inasmuch as we must inevitably deal with this fundamental re-ordering of social life and institutions, let us do it in the most effective way known; let us venture to search out the most constructive, positive program possible and make our efforts count in that direction. Be tolerant, but rather than make tolerance an end, make it a means to richer, more effective conviction. . . .

Three major proposed ways have been noted, and a fourth emerging way has been set forth in broad outlines. The conclusion from this latter position is that the best way to educate the young in present-day America is to let them be caught up, with parents and teachers and others in the community who are sympathetic with their plight, into a thoughtful and courageous campaign to bring on a society which basically, among other changes, will free its economic system from present exploitations. Social attitudes for the new generation will be of worth just in the degree that they take form where this new order is in the making.

Raup, Robert Bruce, "Education on a New Frontier," in *Child Study* (November 1933, pp. 39-40).

288

The Need for Schools and Education

Even if there were no soul (as I have already said), and men did not need schools and the languages for the sake of Christianity and the Scriptures, still, for the establishment of the best schools everywhere, both for boys and girls, this consideration is of itself sufficient, namely, that society, for the maintenance of civil order and the proper regulation of the household, needs accomplished and well-trained men and women. Now such men are to come from boys, and such women from girls; hence it is necessary that boys and girls be properly taught and brought up. As I have said before, the ordinary man is not qualified for this task, and can not and will not do it. . . .

But each one, you say, may educate and discipline his own sons and daughters. To which I reply: We see indeed how it goes with this teaching and training. . . .

But were they instructed in schools or elsewhere by thoroughly qualified male or female teachers, who taught the languages, other arts, and history, then the pupils would hear the history and maxims of the world, and see how things went with each city, kingdom, prince, man and woman; and thus, in a short time, they would be able to comprehend, as in a mirror, the character, life, counsels, undertakings, successes and failures of the whole world from the beginning. From this knowledge they could regulate their views, and order their course of life in the fear of God, having become wise in judging what is to be sought and what avoided in this outward life, and capable of advising and directing others. But the training which is given at home is expected to make us wise through our own experience. Before that can take place, we shall die a hundred times, and all through life act injudiciously; for much time is needed to give experience.

Now since the young must leap and jump, or have something to do, because they have a natural desire for it which should not be restrained (for it is not well to check them in everything), why should we not provide for them such studies?

By the gracious arrangement of God, children take delight in acquiring knowledge, whether languages, mathematics, or history. . . . How I regret that I did not read more poetry and history, and that no one taught me in these branches.

MARTIN LUTHER'S "Letter to the Mayors and Aldermen of all the Cities of Germany in Behalf of Christian Schools" (translated by Painter in *Luther on Education;* Philadelphia, Lutheran Publishing Society, 1889, pp. 196-199).

289

Education Must Become Universal

In harmony with democratic ideals, education must become universal—for all, and for all of a man's life. All the social institutions, including the school, home, community, state, press, theater, and church, will cooperate increasingly in the educative process. Among the values of life which education will more adequately realize for every man are physical well-being, the knowledge of the truth, the appreciation of beauty in all its natural and many-shaped forms, the willing of the good, the earning of one's own living, the sharing of life in love, and the worship of God—this last not as a dispensable appendix, but as an indispensable synthesis, setting time as a moving image in the frame of eternity. What man lives by completely are these seven values: Health, Science, Vocation, Art, Morality, Sociality, and Spirituality. These values must not be separated from each other in any kind of competition, but organized into mutual service. Each life must possess all.

HORNE, HERMAN HARRELL, *This New Education* (New York, Abingdon, 1931), pp. 151-152.

290

Preventives of Ossification

Shift control from the aged to the middle-aged and young.
Get the talented into high places.
Leave the individual a free hand.

Let religion govern individuals but not institutions.
Religious dogma obstructs the adaptive process.
Let there be a balance between groups of intellectuals.
Cherish the scientific interest.
Preserve freedom of inquiry.
Let the learner study life as well as books.
Apply to society the methods of exact measurement.

ROSS, EDWARD ALSWORTH, *Principles of Sociology* (New York, Century, 1921), pp. 507-510.

291

Modern Society and the Individual

Modern society has reached the stage in its evolution when it aggressively imposes its institutions on the individual. It has gone so far as to set up special agencies in its schools in order to insure the transformation of every child, so far as possible, into being able and willing to conform to the social pattern of action and thought. Not only so, but in many of its other institutional organizations society expends a great deal of energy in the aggressive promotion of social practices. We use the general term "education" to describe these facts.

JUDD, CHARLES H., *The Psychology of Social Institutions* (New York, Macmillan, 1926), p. 333.

292

Men of Culture the True Apostles of Equality

This is the social idea; and men of culture are the true apostles of equality. The great men of culture are those who had a passion for diffusing, for making prevail, for carrying from one end of society to the other, the best knowledge, the best ideas of our time; who have laboured to divest knowledge of all that was harsh, uncouth, difficult, abstract, professional, exclusive; to humanize it, to make it efficient outside the clique of the cultivated and learned, yet still remaining the best knowledge and thought of the time, and as a true source, therefore, of sweetness and light.

ARNOLD, MATTHEW, "Sweetness and Light," *in Readings in English Prose of the Nineteenth Century* (Boston, Houghton Mifflin, 1917), p. 535.

293

School the Steering Gear of a Democratic Society

Since education is the reproductive process of the social mind, it is possible for education to predetermine the social structures and activities of the future more or less at will. Put this instead of that into the learning process of today, and this instead of that will come out of the social process of tomorrow. Usually the learning process of today has been inadvertently predetermined by the social process of yesterday; but it can be deliberately predetermined, in part at least, by the conscious will of educational statesmen. Since the school program is the germ plasm of the body social, it follows that mutations can be introduced into the social process by the volition of those who direct the schools. Education may function as an important guiding factor in social evolution, especially in periods of critical transition like the present—not absolutely, to be sure, but to a degree that has never been sufficiently capitalized by an aspiring society. And that throws a new and enlarged responsibility upon educators, to which it is high time that they awake. Potentially, the school is the stearing gear of a democratic society. If society is to be engineered on the basis of ascertained knowledge and general enlightenment, instead of on the basis of superstition, sentiment, and personal ambition, the scholars and educators must proceed to take their place at the wheel. It is the business of teachers to run not merely the school, but the world; and the world will never be truly civilized until they assume that responsibility. Such is the telic function of education.

FINNEY, ROSS L., *A Sociological Philosophy of Education* (New York, Macmillan, 1932), pp. 116-117.

294

The Role of Philosophy in the New Society

It is hardly the business of the philosopher to direct the machine age, or to recreate society, or even to discern all the possibilities of industrialism. The theoretical solution of the social problems belongs, rather, to the applied sociologist who knows the concrete facts more intimately. It is no more the business of the philosopher to resolve the social conflicts than it is the business of the astronomer.

The philosopher is, as Plato described him, the synoptic man. His business is to see reality steadily and to see it whole. Reality includes man, but man is far from exhausting reality. The philosopher must not trespass with his unprovable speculations on the field of the scientist of any type. He must use the findings of all the sciences and his own best thinking to tell us the nature of reality: how the reality we know came to be so well ordered, what we can know, how we can know it, and what we may hope. Since man the scientist can never hope to know all that is knowable, man the philosopher, the thinker, will always have a synthesizing and reflective role to play in human life. It is important that educational institutions have broad-gauged philosophers who are discerning and sympathetic as young people try to find their intellectual way about in our confusing world. If so, there might be fewer suicides among college students.

About industrialism the philosopher is concerned to say that it must not usurp the energies of men, but must serve the ideal ends of living. The machine, after all, is a tool to serve man, not a fad to be served. It is a creation of the human spirit and man should not be an idol-worshiper. Whether the machine is to be used by man in instances to exploit or to destroy his fellow man depends on man's attitudes; it does not depend on the machine, or upon its necessary effects on man. The machine is simply man's greatest tool for the realization of his desires to produce, to transport, and to communicate. Man's attitudes are modifiable, being dependent on his education, his manner of life, and his philosophy.

Man's philosophy has but rarely held that our universe is itself a vast impersonal machine, grinding out little machines, including man, as its products necessarily and without purpose. For this reason the age of machinery has but slight contribution to make to the content of man's higher thinking. Its lesson, rather, is that behind the machine there is mind. In this connection it may be significant to recall that America leads the world in machinery and is near the rear in original philosophic thought.

If the universe has its mechanical aspects, it is because the pulsing life of the universe is regular in its manifestations. Laws are man-made, even so-called natural laws. Nature—the universe—behaves like a vast living organism. Man, a child of the universe, observes this behavior, formulates its procedure, and calls his own formulation a law of nature. His law is only an approximation. The theory of relativity shows us the human element, the observer's viewpoint, in our conclusions, and so tends toward Idealism.

In such a universe of spirit-informing matter as his university has man matriculated for life. He is promoted or demoted as individual and as race according to his attainments. He will die individually, possibly collectively, but from this real university of his, this universe of intelligence, he will never graduate. The purpose of life is progress toward the Infinite.

Horne, Herman Harrell, *This New Education* (New York, Abingdon, 1931), pp. 152-155.

295

Contrasting Views of Education

At the congress at Lancaster, in 1744, between the government of Virginia and the Five Nations, the Indians were told that, if they would send some of their young men to Virginia, the English would give them an education at their college. An orator replied to this offer as follows: "We know that you highly esteem the kind of learning taught in those colleges, and that the maintenance of our young men, while with you, would be very expensive to you. We are convinced, therefore, that you mean to do us good by your proposal, and we thank you heartily. But you who are wise must know that different nations have different conceptions of things; and you will therefore not take it amiss, if our ideas of this kind of education happen not to be the same with yours. We have had some experience of it; several of our young people were formerly brought up at the colleges of the northern provinces; they were instructed in all of your sciences; but when they came back to us they were bad runners; ignorant of every means of living in the woods; unable to bear either cold or hunger; knew neither how to build a cabin, take a deer, or kill an enemy; spoke our language imperfectly; were therefore neither fit for hunters, warriors, or counsellors; they were totally good for nothing. We are, however, not the less obliged by your kind offer, though we decline accepting it; and to show our grateful sense of it, if the gentlemen of Virginia will send us a dozen of their sons, we will take great care of their education, instruct them in all we know, and make men of them."

DRAKE, SAMUEL G., *Biography and History of the Indians of North America* (Boston, Mussey, 1851), p. 41.

296

The Public School

As an exterminator of the class microbe, the public school has no equal. Or, to change the figure, the public school is the womb of genuine democracy; the fruitful soil which brings forth bountiful crops of true brotherhood and enduring fraternity. It is not a leveler, but a builder-up of all parties concerned. It cuts out the cancers of conceit that tend to destroy the vitality and virility of wealth and aristocracy; and it burns away the plague-spots of prejudice and hatred that are so deeply rooted in the body of the rank and file. It plants healthy love and wholesome respect for all in the hearts of all the children of all the people, and as a social force, for the establishment of a civilization based on the principles of truth and justice, the world has never seen its equal.

Smith, William Hawley, *All the Children of All the People* (New York, Macmillan, 1915), p. 318.

297

Man's Moral Idealism the Constructive Force of Progress

Just as we have come to resent all hindrances which keep us from untrammelled comradeship with our fellows, and as we throw down unnatural divisions, not in the spirit of the eighteenth century reformers, but in the spirit of those to whom social equality has become a necessity for further social development, so we are impatient to use the dynamic power residing in the mass of men, and demand that the educator free that power. We believe that man's moral idealism is the constructive force of progress, as it has always been; but because every human being is a creative agent and a possible generator of fine enthusiasm, we are sceptical of the moral idealism of the few and demand the education of the many, that there may be greater freedom, strength, and subtilty of intercourse, and hence an increase of dynamic power. We are not content to include all men in our hopes, but have become conscious that all men are hoping and are part of the same movement of which we are a part.

Many people impelled by these ideas have become impatient with the slow recognition on the part of the educators of their manifest obligation to prepare and nourish the child and the citizen for social relations. The educators should certainly conserve the learning and training necessary for the successful individual and family life, but should add to that a preparation for the enlarged social efforts which our increasing democracy requires. The democratic ideal demands of the school that it shall give the child's own experience a social value; that it shall teach him to direct his own activities and adjust them to those of other people. We are not willing that thousands of industrial workers shall put all of their activity and toil into services from which the community as a whole reaps the benefit, while their mental conceptions and code of morals are narrow and untouched by any uplift which the consciousness of social value might give them.

ADDAMS, JANE, *Democracy and Social Ethics* (New York, Macmillan, 1916), pp. 178-180.

298

Progress

Education does well to reproduce, and by reproducing to conserve the past; it does well to protect the past in the present; it does best of all in adding to the present accumulation of knowledge and power, thus making possible a future better than the past. This is progress indeed. . . .

Progress is the increasing self-possession of the race in its world. Among the many kinds of men that make this progress possible are to be found the scholars.

HORNE, HERMAN HARRELL, *The Philosophy of Education* (New York, Macmillan, 1923), pp. 160, 161.

299

Education the Chief Factor in Social Progress

The Industrial Revolution and its introduction of machinery has placed us at the beginning of a new era. Yesterday was the day of the few; the day of the many is dawning when every man shall have the opportunity of self-realization which is his by right. Social and economic re-organization scientifically applied will continue to engage the thought and enlarge the power of the statesman, but the emphasis will be placed more and more on the chief factor in social progress—Education.

MORGAN, ALEXANDER, *Education and Social Progress* (New York, Longmans, 1916), p. 60.

300

Methods of Social Evolution

Human society is in process of ceaseless change and differentiation, changes which often seem to bear no positive relation to individual and social betterment. . . . Progress, we may conceive, as involving a series of more or less complex changes in human nature, in social relations and in man's relation to his environment.

How are these things accomplished? Ellwood specifies three means. "The lowest method of evolution was by [natural] selection, and that . . . cannot be neglected. The next method of social betterment apparently was the method of adaptation by organized authority, and . . . organized authority in society, or social regulation by means of authority, must indefinitely persist and perhaps increase, rather than diminish; but the latest and highest method of social evolution is not through biological selection nor through the exercise of despotic authority, but through the education of the individual. . . . Human society may be modified best, we now see, through modifying the nature of the individual, and the most direct method [of doing] this is through education."

King, Irving, *Social Aspects of Education* (New York, Macmillan, 1916), p. 218.

301

How to Create National Ideals

By far the most effective method of applying telesis to the social mind, and through that to social organization as a whole, is through education. When the leaders of thought in a country agree upon the ideal toward which they wish to work, the teachers of the country take it up and instill it into the minds of their pupils. Then, if the schools are efficient, that ideal will become the ideal of the country.

Clow, Frederick R., *Principles of Sociology With Educational Applications* (New York, Macmillan, 1927), p. 360.

302

Social Conditions and Physical Deficiency

On the other hand, there is an increasing amount of evidence that social conditions have a great deal to do with the production of physical and mental weakness. We know that bad housing conditions, poverty, bad habits and customs, unsanitary factories and dwellings and social neglect of certain poisons break down the physical efficiency of people, destroy ideals of correct home life, cut the root of ambition and of hope, divide society into suspicious and wrong classes, put a strain upon the minds of some which ends in insanity and makes impossible the realization of ideals of cleanliness and health. Whether these conditions affect the germ plasm by which some forms of degeneracy like feeblemindedness are transmitted we do not know, but the fact that this defect and bad social conditions are so often found together, and the farther fact that these conditions reduce the physical efficiency of people physically and mentally, lead to the natural presumption that they may also affect the germ plasm and thus cause defect. That, however, remains to be determined.

Blackmar, Frank W., and Gillin, John L., *Outlines of Sociology* (New York, Macmillan, 1924), p. 508.

303

The Question of Progress Turns Upon the Question of Education

The goal of human progress is complete mastery, complete control, over all of the conditions of existence. Well balanced progress means, therefore, that man comes into increasing harmony with his own nature, with his fellow men, and with physical nature. It gives man greater efficiency in performing physical work, because he utilizes the laws of physical nature. It gives him greater ability to survive because he knows how to control both nature and himself. Finally it brings about greater harmony in human relations, because it gives control over human behavior.

Now it is evident that progress in this sense of increasing control over physical nature and over human behavior depends mainly upon two things, the increase of knowledge and the increase of good will among men. It is further evident that these can be brought about only through training the intelligence and the moral character of individuals. Heredity and biological conditions may count, but they can be controlled only through increasing knowledge and good will. Therefore, the whole question of progress turns upon the question of education. If we wish to bring about progress in human society in a rational, deliberate way, we can do so only through a rational program of education.

Ellwood, Charles A., *Sociology and Modern Social Problems* (New York, American, 1924), pp. 374-375.

304

The Chief Problem of Education

Students of human nature in all times have urged that deliberate training of some sort is absolutely essential to the fitting of an individual to adjust himself to a complex social environment; nature unaided cannot accomplish all that is demanded in this direction. Every important scheme which has been proposed for the improvement of social and individual life has laid emphasis upon the school as the instrument to be considered at the outset. Plato, the most serious and competent writer on social welfare in ancient times, gave chief attention to education as the means of realizing his ideal community. All students have appreciated that the need of educational influence to perfect the individual in his social adjustments arises out of the child's inability to adapt himself readily and effectively to all phases of the social environment into which he is cast at birth. The newcomer's vision has not been made keen to discern the social goal ahead; his feet have not been practiced to the route; his lungs have been accustomed to a heavier atmosphere. The young child is on a par with primitive man in his social inclinations and abilities, but he must learn to live among men whose relations are well-nigh infinitely complex, and who must, to a large extent at any rate, assume attitudes of cooperation, instead of those of opposition and aggression.

The chief problem of education regarded from this standpoint consists either in repressing in some manner such of the child's native impulses as are out of alignment with contemporary social practices, or transforming these impulses into tendencies that will bring the individual into harmony with the customs, ideals, and institutions of civilized society.

O'Shea, M. V., *Social Development and Education* (Boston, Houghton Mifflin, 1909), pp. 248-249.

305

Factors Which Govern the Fate of Social Groups

In this rapid survey of the rise and fall of civilization, we have noted four factors which decisively govern the fate of social groups. First, there stands the inexorable law that apart from some transcendent aim the civilized life either wallows in pleasure or relapses slowly into a barren repetition with waning intensities of feeling. Secondly, there stands the iron compulsion of nature that the bodily necessities of food, clothing, and shelter be provided. The rigid limits which are thereby set to modes of social existence can only be mitigated by the growth of an understanding by which the interplay between man and the rest of nature can be adjusted. Thirdly, the compulsory dominion of men over men has a double significance. It has a benign effect so far as it secures the coordination of behavior necessary for social welfare. But it is fatal to extend this dominion beyond the barest limits necessary for this coördination. The progressive societies are those which most decisively have trusted themselves to the fourth factor which is the way of persuasion. Amidst all the activities of mankind there are three which chiefly have promoted this last factor in human life. They are family affections aroused in sex relations and in the nurture of children, intellectual curiosity leading to enjoyment in the interchange of ideas, and—as soon as large-scale societies arose—the practice of Commerce. But beyond these special activities a greater bond of sympathy has arisen. This bond is the growth of reverence for that power in virtue of which nature harbours ideal ends, and produces individual beings capable of conscious discrimination of such ends. This reverence is the foundation of the respect for man as man. It thereby secures that liberty of thought and action, required for the upward adventure of life on this Earth.

Whitehead, Alfred North, *Adventures of Ideas* (New York, Macmillan, 1933), pp. 108-109.

306

A Greater Mankind Latent in Men

One thing I shared with Sanderson altogether, and that was our conviction that the present life of men, at once dull and disorderly, competitive, uncreative, cruelly stupid and stupidly cruel, *unless it is to be regarded merely as a necessary phase in the development of a nobler existence,* is a thing not worth having. . . . Unless there is a more abundant life before mankind, this scheme of space and time is a bad joke beyond our understanding. . . . But we two shared the belief that latent in men, and perceptible in men is a greater mankind, great enough to make every effort to realize it fully, worth while. . . . And the way to that realization lies, we both believed, through thought and through creative effort, through science, through art and the school.

Wells, H. G., *The Story of a Great Schoolmaster* (New York, Macmillan, 1924), pp. 175-176.

307

The Importance of Variation in Human Society

Among lower animals variation facilitates new adaptations, but in man it has assumed an added function, that of suggesting new departures, new lines of progress, and in doing this it makes important contributions to the growth of experience. Education is always in danger of arrest from compression by immediate or "practical" aims. It should be of a sort that admits of indefinite expansion, so that in the end it may become commensurate with life; but this capacity for enlargement requires something more than knowledge. Inability to see this led to the fallacy of the educational system of the Middle Ages, and we have fallen heir to their infatuation for formal training and learning. Information did fairly well for the simple conditions of early times when the necessary adaptations of life were neither complicated nor numerous, but if education is to be adequate to the life of to-day, it must take the whole plexus of social forces into account, and these social forces are, after all, only biological principles working in human society, to be intelligently interpreted and used for the greater life of society.

One of the elements in progress, and by no means an unimportant one, is that of what we have just been speaking, and which we may call suggestive variation. The world is moving with constantly accelerated velocity, not merely because we have more information to-day than yesterday, but because what we know means more to us, and this alchemistic power of getting out of facts something not superficially visible in them is mind's contribution to progress. Now education has never appreciated the importance of variation in human society, and for that reason has never set itself to develop it. The very capacity for variation, implying as it does a certain flexibility, facilitates ready adaptation in the individual, and its suggestive influence on society promotes adaptation in others. The means, of course, by which this influence becomes effective is speaking and writing. The function of education here is to develop a mental attitude that is friendly to variation, and to train to rightly see and interpret relations. There seems to be an impression that if we give a child or a man information enough he will at some time and in some way—though we are never told just when or how—learn to apply it to the problems of life. But the facts do not justify this view. The astonishing velocity with which science and industry are moving to-day calls for correspondingly rapid adjustment, and owing to defective principles of education we are unable to meet the demand. This is the reason for the conflict between labor and capital. Industry has advanced so fast that society, with its instinctive method of reacting, could not keep up with it. Not educated to vary flexibly we cannot adjust ourselves in time to new conditions. We are confused and baffled by them. The intellectual element enters into human adaptations, and the more rapid the change the more conscious and purposive must adjustment become. Fitting for this adjustment belongs peculiarly to education. But here we fail. We have given too narrow an interpretation to education. Our narrow theory regards it as a preparation to adapt ourselves to a certain set of conditions, i. e., *those found existing*. The result is intellectual rigidity and obstinate resistance to evolution. The mental processes, moulded in certain mechanical forms of activity, find hardship in readjustment when conditions change, and, as we have seen, change is the rule to-day. Here, again, we are adhering too closely to the animal method, where movement is slow and rapid adaptation is not expected. Education should seek to develop a mental plasticity, a capacity for understanding and getting control of new situations, and for making them.

To-day the great changes are social. Evolutionary conditions are pressing us toward a fundamental reconstruction of society. The reconstruction is a profound *social variation*. Education—that is to say, those who have the magnificent educational equipment of the nation in charge—should have foreseen this and made the new generation of youths ready for it, should have prepared them to recognize it as another great unfoldment of man, comprehending, assisting, and developing it. But education has been engrossed in the comparatively petty role of teaching lessons. It has fitted children for immediate, *instinctive* environment, quite omitting rational, or higher social environment. The result is present conditions—a practical dead-lock of social forces. Education cannot truly awaken the interest or command the confidence of the people until it assumes the higher function.

SWIFT, EDGAR JAMES, *Mind in the Making* (New York, Scribner, 1909), pp. 323-326.

308

Some Requisites for Social Progress

Successful organisms modify their environment. Those organisms are successful which modify their environment so as to assist each other. This law is exemplified in nature on a vast scale. For example, the North American Indians accepted their environment, with the result that a scanty population barely succeeded in maintaining themselves over the whole continent. The European races when they arrived in the same continent pursued an opposite policy. They at once cooperated in modifying their environment. The result is that a population more than twenty times that of the Indian population now occupies the same territory, and the continent is not yet full. Again, there are associations of different species which mutually cooperate. This differentiation of species is exhibited in the simplest physical entities, such as the association between electrons and positive nuclei, and in the whole realm of animate nature. The trees in a Brazilian forest depend upon the association of various species of organisms, each of which is mutually dependent on the other species. A single tree by itself is dependent upon all the adverse chances of shifting circumstances. The wind stunts it; the variations in temperature check its foliage; the rains denude its soil; its leaves are blown away and are lost for the purpose of fertilization. You may obtain individual specimens of fine trees either in exceptional circumstances, or where human cultivation has intervened. But in nature the normal way in which trees flourish is by their association in a forest. Each tree may lose something of its individual perfection of growth, but they mutually assist each other in preserving the conditions for survival. The soil is preserved and shaded; and the microbes necessary for its fertility are neither scorched, nor frozen, nor washed away. A forest is the triumph of the organization of mutually dependent species. Further a species of microbes which kills the forest, also exterminates itself. Again the two sexes exhibit the same advantage of differentiation. In the history of the world, the prize has not gone to those species which specialized in methods of violence, or even in defensive armour. In fact, nature began with producing animals encased in hard shells for defence against the ills of life. It also experimented in size. But smaller animals, without external armour, warm-blooded, sensitive, and alert, have cleared these monsters off the face of the earth. Also, the lions and tigers are not the successful species. There is something in the ready use of force which defeats its own object. Its main defect is that it bars cooperation. Every organism requires an environment of friends, partly to shield it from violent changes, and partly to supply it with its wants. The Gospel of Force is incompatible with a social life. By force, I mean antagonism in its most general sense.

Almost equally dangerous is the Gospel of Uniformity. The differences between the nations and races of mankind are required to preserve the conditions under which higher development is possible. One main factor in the upward trend of animal life has been the power of wandering. Perhaps this is why the armour-plated monsters fared badly. They could not wander. Animals wander into new conditions. They have to adapt themselves or die. Mankind has wandered from the trees to the plains, from the plains to the seacoast, from climate to climate, from continent to continent, and from habit of life to habit of life. When man ceases to wander, he will cease to ascend in the scale of being. Physical wandering is still important, but greater still is the power of man's spiritual adventures—adventures of thought, adventures of passionate feeling, adventures of aesthetic experience. A diversification among human communities is essential for the provision of the incentive and material for the Odyssey of the human spirit. Other nations of different habits are not enemies: they are godsends. Men require of their neighbours something sufficiently akin to be understood, something sufficiently different to provoke attention, and something great enough to command admiration. We must not expect, however, all the virtues. We should even be satisfied if there is something odd enough to be interesting.

Modern science has imposed on humanity the necessity for wandering. Its progressive thought and its progressive technology make the transition through time, from generation to generation, a true migration into uncharted seas of adventure. The very benefit of wandering is that it is dangerous and needs skill to avert evils. We must expect, therefore, that the future will disclose dangers. It is the business of the future to be dangerous; and it is among the merits of science that it equips the future for its duties. The prosperous middle classes, who ruled the nineteenth century, placed an excessive value upon placidity of existence. They refused to face the necessities for social reform imposed by the new industrial system, and they are now refusing to face the necessities for intellectual reform imposed by the new knowledge. The middle class pessimism over the future of the world comes from a confusion between civilisation and security. In the immediate future there will be less security than in the immediate past, less stability. It must be admitted that there is a degree of instability which is inconsistent with civilisation. But, on the whole, the great ages have been unstable ages.

WHITEHEAD, ALFRED NORTH, *Science and the Modern World* (New York, Macmillan, 1926), pp. 296-299.

309

Historical Conditions of Governmental Action

Whatever view be taken in each particular case of the rightfulness or advisability of state regulation and control, one rule there is which may not be departed from under any circumstances, and that is the rule of historical continuity. In politics nothing radically novel may safely be attempted. No result of value can ever be reached in politics except through slow and gradual development, the careful adaptations and nice modifications of growth. Nothing may be done by leaps. More than that, each people, each nation, must live upon the lines of its own experience. Nations are no more capable of borrowing experience than individuals are. The histories of other peoples may furnish us with light, but they cannot furnish us with conditions of action. Every nation must constantly keep in touch with its past; it cannot run towards its ends around sharp corners.

WILSON, WOODROW, *The State* (Boston, Heath, 1907), p. 639.

310

Science and Civilization

Confronted with the paradox that science has changed the face of the western world but not its heart, is there no way we may reconcile mechanics and moral values? The tragedy is the incompatibility of multiplied power with human passion. In sociological terms it is cultural lag, for applied science and invention move with such acceleration that social control cannot keep up with them. The evil may sometimes be nothing more than shiftings and the pain of change. The same process which has created large scale industry and the Great Society has, for example, reduced the scale and the significant services of the family. We may not like this redistribution of functions, but are we in a position to assert that the new alignment is necessarily evil? That certain elements in contemporary life are badly out of balance is, however, clear enough.

I believe that the greatest help for this lack of balance must come from scientists themselves. Men like Soddy, Haldane, and Millikan are positive on this point. While standing for absolutely unrestricted freedom of thought, one can surely insist that no man has an unlimited franchise to dose the world with his mental nostrums in the name of science. Nor can the scientist claim immunity under the magic phrase that science is an end in itself. There can be no science for science's sake any more than art exists for art's sake. The high priest of art for art's sake spent his last bitter years in jail. A healthy rising tide of protest begins to assert itself against this notion of science and scientific prerogatives, from masters of science; from those who still believe in the worth of morality and religion; from the people who pay the costs and feel that the game is not worth the candle; from the police who will not ignore moral delinquency though committed by men who, as pseudo-scientists, claim to be beyond good and evil.

Science must accept the idea that it cannot dispense with social responsibility for the conduct of its high priests and for the effects of their "discoveries." Whether they like it or not, their own researches are revealing a world totally different from what they anticipated. A world that is essentially mind and not star dust will force a revision of terminology and basic working concepts throughout the whole range of physical science. We may anticipate, therefore, not a spiritistic intrusion into the laboratory, nor a recrudescence of crass superstition, but rather a recognition that pure science does not mean knowledge as divorced from any idea of value or ultimate purpose. Naturally, to accomplish this end value must be conceived in the broadest terms as including knowledge of the universe and esthetic joy in its wonders and magnificence. For "value" to man does not mean just more bread and thicker butter, nor even Heine's sugar peas and roses; it means also enlargement of understanding and liberating the imagination.

Put otherwise, this obligation upon science differentiates between objectives and methods. Methods may and must be as impersonal as possible; but objects are always personal. Not even the mathematician or analytical chemist can divest himself of human qualities in his setting up of problems, or in his zest. Beauty, symmetry, transcendental mysteries always fringe this quest, even though his tools may be completely sterilized from all such qualities as love and hate, ambition, worldly recognition, applause of one's fellows, jealousy, desire to benefit the race, and the like.

Just as bloody, violent types of men have been weeded out through age-long action of social control and social selection; that is, just as standards of social value have been won and impress themselves on the character of the average citizen, so we may expect that scientists and inventors who fail to consider consequences and value in their investigations and inventions will be weeded out. Scientists need to cultivate moral imagination and social perception in order to guard themselves against the tragedy of finding their pure science prostituted to impure or deadly purposes.

More than all else science needs perspective. It suffers from the "only child" complex. Just a grain of humility and a dash of humor would eliminate the pontifical attitude which sometimes makes it look ridiculous. Perspective would safeguard it against the futility of attempting to dogmatize and to base social policy upon pinhead researches about unimportant things. Most of the embarrassment caused by overzealous eugenists or moron-hunters with their new "decalogues of science" could have been avoided by the biologists and psychologists themselves; it was only necessary to hold fast to the principle that no one can generalize the infinite upon investigations of the infinitesimal. Thus not only the purposes but also the mechanics of scientific research need perspective. And only a liberal education can insure that perspective. A Ph.D. who knows only the behavior of white mice and confesses that he knows nothing of philosophy or social science or even human psychology may become a positive social menace. Upon the universities, therefore, as trainers of scientific men, rests the obligation to give them education as well as research technique.

To avoid pseudo-science, genuine accredited science needs far wider distribution. There are plenty of quacks: we need more Huxleys. Old scientific doctrines now rejected linger on in the minds of laggard teachers, doctors, psychologists, lawyers, captains of industry. Patent medicine makers exploit this fact. Just one illustration: a century ago heat was considered as a substance and called phlogiston. Until recently (and perhaps it is still true in backward districts) pharmacists have sold a kind of mud poultice labeled "anti-phlogiston." Physics moved on to new definitions of heat in terms of motion, electricity, or what not, but we are still wrestling with antiquated physics in the form of pharmaceutical folk-lore. Science has a responsibility for cleaning away its own garbage while moving to more modern quarters.

Not all lines of discovery move at equal speed. Hence new types of social control must be devised, more powerful, more discriminating, more flexible than heretofore, if applied science is to become synonymous with increased human welfare. New rewards, distinctions, penalties even, new ratings of success, perhaps even new forms of administration are needed. Such public agencies as the Federal Trade Commission have been pointing the way to protection against fraud and unfair practices. The professional codes adopted by over a thousand trade organizations and professions in the United States illustrate the possibility of control without governmental interference. The move to make business a profession, if successful, should contribute largely to new standards of "success." If any considerable section of the business world would seriously accept the principle that private business is public service, and would enact that principle into established practice, no one would need to worry about science being prostituted to exploitive ends. But to make assurance doubly sure and to meet physical science on its own grounds, why not encourage and endow moral and spiritual research?

Two brief quotations will indicate not only how the minds of some great scientists have been reaching out for spiritual research, but also the deplorable contrast between those great scientific minds and the lesser breed that are still caught in the treadmill of an antiquated materialism and are trying to seduce a student following. Roger Babson recently reported a conversation with the late Charles P. Steinmetz, undoubtedly the world's greatest electrical engineer. They were talking over prospective future inventions in the fields of radio, aeronautics, power transmission, etc. Babson asked Steinmetz: "What line of research will see the greatest development during the next fifty years?" After careful thought, Steinmetz replied: "Mr. Babson, I think the greatest discovery will be made along spiritual lines. Here is a force which history clearly teaches has been the greatest power in the development of men and history. Yet we have merely been playing with it and have never seriously studied it as we have the physical forces. Some day people will learn that material things do not bring happiness and are of little use in making men and women creative and powerful. Then the scientists of the world will turn their laboratories over to the study of God and prayer and the spiritual forces which as yet have hardly been scratched. When this day comes, the world will see more advancement in one generation than it has seen in the past four."

Contrast this with the narrow and belated dogmatism revealed in a passage from a recent book, "The Making of the Modern Mind," by an eastern university professor: "The farther we travel, the more obscure and insignificant does Man appear. And three points also emerge. Firstly, the uniformity of natural 'law' remains as absolute in these regions of infinite greatness as in our own world of human dimensions. Secondly, no sign of purpose can be detected in any part of the vast Universe disclosed by our most powerful telescopes. Thirdly, this great new sphere of experience affords not the smallest trace of evidence for the existence of any spiritual entity. We find nothing but unimaginable tracts of space and time in which move bodies by fixed laws toward ends which are wholly fortuitous, and have not the smallest relations to the advantage or requirements of Man."

Can we wonder that the president of that eastern university in his last annual report deplored the fact "that scientific study . . . has fallen far short of the high expectations which were formed of it and for it when the scientific movement in education began some sixty years ago?" He complains that the public mind is as untouched by scientific method as if no such thing existed, and that even men of science themselves, when out of sight of their own laboratories, "betray the most astounding willingness to become the victims of rumors, dogmatic assertions, and emotional appeals of every sort." Part of the difficulty, he believes, is to be found in the fact that science "has been suffering from what may be described as a superiority complex which has prevented it from realizing its true place in the scheme of things."

The Golden Rule has been successfully tried out in several notable industrial plants recently; hence the cash-nexus is not a necessary premise of contemporary business. But there is still the worship of organization, size, and activity as such to indicate that the ghost of mechanism is not exorcised. Manipulation in machine terms is still acceptable business practice. And to be called an "operator" is highest praise. Many sections of industry still labor under the superstition that the more noise and smoke the more production. It is not science, but sheer human stupidity, that tolerates the hideous dirt and noise of industrialism. As I write in this vaunted "most beautiful suburb in America" I can see columns of soft coal smoke pouring from half a dozen chimneys in defiance of health ordinances or smoke inspectors. We would not for a minute permit our neighbors to throw their garbage into our yards, still less into our rooms. Until we regard smoke as garbage, or refuse to allow a man to defy science and standards of human decency by such a waste of good fuel, we are in no sound position to lay our own ineptitude on the back of either experimental or applied science.

No more can science as such be blamed categorically with the destructive forces of dynamite, poison gas, or the submarine. They are chargeable primarily to human passion and only incidentally to that fraction of the world of science which will sell itself to the highest bidder or blindly lend itself to the agents of destruction. Science is not responsible for man's worship of material things, tools, or mechanism. The worst one can charge is that it has fostered this tendency and made it more obvious.

The way of safety, then, seems to involve aiding science to get itself out of its dead-center and its dogma; generating moral imagination through social education; developing more effective methods of social control; challenging religion to offer a spiritual dynamic which will meet mechanistic science on its own ground and prove by the pragmatic test that it has a more complete and more workable system of belief.

TODD, ARTHUR J., "Science and Civilization," in *Religious Education* (Volume XXIII, February 1928), pp. 95-98.

CHAPTER XIII

The Meaning of Experience

THE selections in this chapter deal with the nature and meaning of experience. The subject has a place in philosophy of education because different concepts of experience lead to different types of educational theory and practice. How this comes about is well illustrated in the quotation from Horne (311). Here we see, for example, that the pragmatic philosophy of education, with its emphasis upon projects and activity programs, is based upon an inadequate concept of experience, and that it is therefore open to serious criticism. Haldane (312) brings out the fact, sometimes overlooked by pragmatists, that the world of our experience is a world of personality. The eminent scientist Eddington distinguishes (313) between sense experience and the unseen world. The logician and philosopher James Ward shows (314) that experience is always a unity. The student will find throughout the chapter a wealth of material for study and reflection. Special attention should be given to selections 326 and 327.

311

Concepts of Experience Reflected in Educational Theory

Then there is the question of the meaning of experience. To Doctor Dewey it is the interplay of action and reaction between the organism and its environment; it is a doing and an undergoing. Herbart made a distinction—and it would appear wisely so—between man's relation to things, which he called experience, and man's relation to man, which he called intercourse (Umgang). There is a wealth of personal meaning in "intercourse" that one misses in "experience" of things. Doctor Dewey's analysis of experience largely eliminates the personal. The self is not central in his system.

The effect of this view appears in his educational theory in making control indirect—through things, rather than direct and personal. Education, then, becomes, in his phrase, the "reconstruction of experience," which is impersonal, instead of the growth of self-conscious personality in a universe of persons.

In this pragmatic philosophy of education the function of thinking is to direct movement, to guide the problem-solving process, to find ways and means of overcoming practical difficulties. Thought is a tool; an idea is an instrument; action is primary. Undoubtedly, thinking is at times a mode of directing responses to stimuli; this is practical thinking. But thought has other functions, too, notably the function of representation and also of pure reflection. On a cloudy day the question of carrying an umbrella is practical; the question of whether there is a law descriptive of, or predictive of, the movements of clouds involves the representative function of thought; it is not a question of controlling the movements of the clouds, but of understanding them. There is a knowledge of nature which leads to control over nature; and there is a knowledge of nature, based on observation, not experimentation, which does not yield control, for example, in astronomy. And, further, one may form hypotheses concerning the nature of the so-called laws of nature which are not subject to experimentation and verification, as for example, that they are man-made, that they do not belong to nature per se. Here thinking is pure reflection, philosophy proper, lacking the power to demonstrate its own conclusions. Doctor Dewey establishes the controlling function of thought and rejects, or at least subjects, its representative function in science and its reflective function in philosophy. This is the denial of philosophy altogether, and his "Reconstruction in Philosophy," one of his most important books, becomes the destruction of philosophy. Such philosophy of education does not allow a man to find his way about intellectually in his universe. In education it puts all culture to work. We venture the suggestion that if Doctor Dewey had been educated in accordance with the terms of his own philosophy, he would not be so well educated as he is, especially in the field of classical philosophy. We may agree that common knowledge, shared with others, cannot be divorced from action and comes only by experimental verification. But there are two consequences that should not be drawn from this position, namely, first, that the individual has no socially unverified knowledge, even of his own mental processes, and, second, that thinking beyond actual or possible experimental data is "vain," futile," "idle." The individual has knowledge of an introspective sort which he alone verifies, which is not subject to the experimental inquiry of an observer; and thinking has a non-experimental function. Can experience ask the question, How is experience possible? Can experience answer it?

In this connection let it be noted that Doctor Dewey provides no logical refutation of the classical speculative philosophy. His mode of approach is the genetic. He shows the social conditions under which classical philosophies arose. Since these social conditions have changed, the conclusion is drawn that the philosophies are invalid. "It seems to me," he writes, "that this genetic mode of approach is a more effective way of undermining this type of philosophic theorizing than any attempt at logical refutation could be." Such a mode of refutation involves a non-sequitur. The social origin of a theory does not determine its truth. The fact that Plato wrote under aristocratic social conditions does not settle the question of the truth of his theory of the ideas. Let it be noted that the same social conditions saw the birth of the Sophists, the first pragmatists and humanists.

Horne, Herman Harrell, *This New Education* (New York, Abingdon, 1931), pp. 104-107.

312

The World of Our Experience a World of Personality

We can in thought abstract from, or leave out of account, the teleological determination of our experience, and treat the external world as if the appearances in it existed entirely apart from their teleological relations to ourselves. In scientific thought we actually do make this abstraction, leaving out of account the fact that all our scientific ideas are human ideas, the product of human development, and gradually evolved to meet human needs. We can also regard human activity in relation to the external world as simply the action of one self-existent thing on other self-existent things, without any regard to the teleological determination of this activity in relation to human organic needs. For certain purposes this abstraction from reality is useful; but we must be clear that it is an abstraction from reality, and that in considering the nature of personality we cannot make any such abstraction. The apparent self-existent things in the form in which they appear to us are themselves the creation of our own thought—are machinery which we have made for our own purposes. The parts of this machinery may appear to exist independently of one another; but all are determined as parts, however imperfect, which we have made for our own purposes. Their imperfection is our own imperfection; for they are part of ourselves and belong to our personality. We have made them in order to use them for certain purposes, and we do so use them. In scientific work we are not simply studying passively something which is apart from and independent of us: our real aim is just as much practical as that of any ordinary workman. He has to study things just as we do, and our study of them is only part of the gaining control of them, just as in his case. Our theories are practical theories, just as his are, though he is putting them to immediate practical use, while we are not.

The conclusion thus reached is that the world of our experience is a world of personality. We can reach this conclusion either from the purely philosophical side, with Kant and the other philosophers, through the abstract demonstration that the world we see is the world as we see it. Or we can reach it from the side of human history, through the more concrete demonstration that the world we see is the world which by painful human effort we have gradually learned to fashion in thought and action. The claim sometimes advanced on behalf of natural science that it deals with absolute reality, independent of man himself, cannot be maintained.

Haldane, J. S., *Mechanism, Life and Personality* (London, Murray [American publisher, Dutton, New York], 1914), pp. 113-115.

313

Sense Experience and the Unseen World

The interaction of ourselves with our environment is what makes up experience. Part of that interaction consists in the sensations associated with impulses coming through our sense-organs; it is by following up this element of experience that we reach the scientific problem of the physical world. But surely experience is broader than this, and the problem of experience is not limited to the interpretation of sense-impressions.

Picture first consciousness as a bundle of sense-impressions and nothing more. As the sensations succeed one another, as they are compared in one consciousness and another, from somewhere comes the query "What are we to think of it all? What is it all about?" To answer this is the purpose of science. But picture again consciousness, not this time as a bundle of sense-impressions, but as we intimately know it, responsible, aspiring, yearning, doubting, originating in itself such impulses as those which urge the scientist on his quest for truth. "What are we to think of it all? What is it all about?" This time the answer must be broader, embracing but not limited to the scientific answer.

Normally it is my task to propagate the truths of science, to urge its outstanding importance, and to tread myself the way by which it seeks an understanding of the phenomena which we experience. It is far from my thought to disparage what we gain by this quest. As truly as the mystic, the scientist is following a light; and it is not a false or an inferior light. Moreover, the answers given by science have a singular perfection, prized the more because of the long record of toil and achievement behind them. Why then do I not produce one of these scientific answers now? Simply because before giving an answer, it is usual to listen to the question that is put. It is no use having ready a flawless answer if people will not put to you the question it is intended for. So far as I can judge, the kind of question to which I have exposed myself by coming here tonight is, What is the proper orientation of a rational being towards that experience which he so mysteriously finds himself partaking of? What conception of his surroundings should guide him as he sets about the fulfilment of the life bestowed on him? Which of those strivings and feelings which made up his nature are to be nourished, and which rejected as the seed of illusion? The desire for truth so prominent in the quest of science, a reaching out of the spirit from its isolation to something beyond, a response to beauty in nature and art, an Inner Light of conviction and guidance—are these as much a part of our being as our sensitivity to sense-impressions? I have no ready-made answer for these questions. Study of the scientific world cannot prescribe the orientation of something which is excluded from the scientific world. The scientific answer is relevant so far as concerns the sense-impressions interlocked with the stirring of the spirit, which indeed form an important part of the mental content. For the rest the human spirit must turn to the unseen world to which it itself belongs.

Some would put the question in the form "Is the unseen world revealed by the mystical outlook a reality?" Reality is one of those indeterminate words which might lead to infinite philosophical discussions and irrelevancies. There is less danger of misunderstandings if we put the question in the form "Are we, in pursuing the mystical outlook, facing the hard facts of experience?" Surely we are. I think that those who would wish to take cognisance of nothing but the measurements of the scientific world made by our sense-organs are shirking one of the most immediate facts of experience, namely that consciousness is not wholly, nor even primarily a device for receiving sense-impressions.

We may the more boldly insist that there is another outlook than the scientific one, because in practice a more transcendental outlook is almost universally admitted. I cannot do better than quote a memorable passage from the Swarthmore Lecture by J. S. Hoyland last year:

"There is an hour of the Indian night, a little before the first glimmer of dawn, when the stars are unbelievably clear and close above, shining with a radiance beyond our belief in this foggy land. The trees stand silent around one with a friendly presence. As yet there is no sound from awakening birds; but the whole world seems to be intent, alive, listening, eager. At such a moment the veil between the things that are seen and the things that are unseen becomes so thin as to interpose scarcely any barrier at all between the eternal beauty and truth and the soul which would comprehend them."

Here is an experience which the "observer" as technically defined in scientific theory knows nothing of. The measuring appliances which he reads declare that the stars are just as remote as they always have been, nor can he find any excuse in his measures for the mystic thought which has taken possession of the mind and dominated the sense-impressions. Yet who does not prize these moments that reveal to us the poetry of existence? We do not ask whether philosophy can justify such an outlook on nature. Rather our system of philosophy is itself on trial; it must stand or fall according as it is broad enough to find room for this experience as an element of life. The sense of values within us recognizes that this is a test to be passed; it is as essential that our philosophy should survive this test as that it should survive the experimental tests supplied by science.

EDDINGTON, ARTHUR S., *Science and the Unseen World* (New York, Macmillan, 1929), pp. 39-46.

314

Experience Always Is a Unity

It is then by raising this question as to the nature of experience that, as I think, we shall see the untenability both of dualism and of the neutral monism that is nominally to supersede it. I have mentioned Kant, not because I propose to follow him in detail, but because he first raised the right question, avoiding in the main the one-sidedness both of his sensationalist and of his rationalist precursors. There are active as well as passive factors in experience, and the precritical philosophers had tended each to emphasize only one. To carry the mind beyond itself Locke's *tabula rasa* was as helpless in the one way as Leibniz's windowless monad was in the other. But Kant, though he made both sensibility and understanding essential to knowledge, yet failed to make a satisfactory unity of the two. His "affections of the sensibility" were only Locke's impressions over again. Between the aggregate of these affections and the independent functions of the understanding, he did not succeed in establishing any true organic connexion. His matter of knowledge and his forms of knowledge stood too much apart; the result was too much that of sensationalism and rationalism placed side by side, rather than the complete reconciliation of both. Still it was his problem, taking experience as a fact, to render it intelligible, and he entered upon this, not by assuming a dualism of matter and mind, but by insisting on the duality in unity of subject and object. And with this we too must start.

Let no one hastily conclude that between this duality and that dualism there is only the faintest verbal difference, that subject and object are but mind and matter under other names. According to the Cartesian philosophy, of course, mind and matter were not only distinct and disparate, but absolutely separate and mutually independent. Their union in fact was a miracle, and so, for science, a stumbling-block; and one, too, which the various hypotheses of occasionalism, pre-established harmony, psychophysical parallelism, have severally failed to surmount. But at any rate there cannot be this great gulf fixed dividing one part of experience from another. We may ask how such conceptions as matter and mind have arisen and discuss their validity, but we cannot set out from this dualism as if it were a fact.

There is for each but one experience, his own; and an experience that is not owned is a contradiction. We can assign no boundary to our experience without at once extending it in thought, and thought itself involves experience. Hence, the phrase, "content of experience," or "content of consciousness," is apt to be misleading. The experience of one is not limited by the experience of another as one portion of time or space is limited by another portion of time or space. The continuity of experience is not then determined from without. Experience is rather an organic unity that we always regard as self-maintained. In a word it is life,—life as it is for the living individual, not life, the interaction of organism and environment, with which the so-called biologist is exclusively concerned, and where both organism and environment are objects for a distinct observer. It behooves us therefore to take all possible pains to keep these two very different standpoints distinct. Psychology, as I have already remarked earlier in these lectures, has been most seriously hampered by confusing them.

We start then with this duality of subject and object in the unity of experience. What a subject without objects, or what objects without a subject, would be, is indeed, as we are often told, unknowable; for in truth the knowledge of either apart is a contradiction. It is their unity that specially interests us, for we look to this to free us from the perplexities of dualism. Some current conceptions of this unity I feel bound to controvert. First of all it is held and rightly that to a given experience or life there can only be one subject, but that—and to this I demur—there must be many objects. The unity of experience pertains to the objective as well as to the subjective. According to Kant, it will be remembered, experience begins with a mere manifold or disconnected multiplicity of sensations, which are then synthesised into a temporo-spatial continuity. Disconnected in a logical sense this manifold may be, but psychology, I trust, has outgrown this notion of isolated particulars or "mental atoms," somehow strung together on a "thread of consciousness." Whatever development or differentiation an individual experience may undergo, it does not become but always is, a unity. Sensations are not like grains that the subject picks up, but changes in an objective continuum that is always there as an unbroken whole, however indefinite as respects boundaries.

Ward, James, *Naturalism and Agnosticism* (London, Black [American agent, Macmillan, New York], 1915), pp. 402-404.

315

Mind Is the Most Direct Thing in Our Experience

Penetrating as deeply as we can by the methods of physical investigation into the nature of a human being we reach only symbolic description. Far from attempting to dogmatise as to the nature of the reality thus symbolised, physics most strongly insists that its methods do not penetrate behind the symbolism. Surely then that mental and spiritual nature of ourselves, known in our minds by an intimate contact transcending the methods of physics, supplies just that interpretation of the symbols which science is admittedly unable to give. It is just because we have a real and not merely a symbolic knowledge of our own nature that our nature seems so mysterious; we reject as inadequate that merely symbolic description which is good enough for dealing with chairs and tables and physical agencies that affect us only by remote communication.

In comparing the certainty of things spiritual and things temporal, let us not forget this—Mind is the first and most direct thing in our experience; all else is remote inference.

Eddington, Arthur S., *Science and the Unseen World* (New York, Macmillan, 1929), pp. 36-37.

316

A Threefold Division of Experience

From the point of view of our present discussion, we may make a threefold division of experience. We have first this experience of intersubjective intercourse. This yields a complete knowledge of what is, *prima facie,* causal efficacy. I know that my fellow-man is determined or influenced by my action, as I, in turn, am determined or influenced by his. Society, civilisation, and science itself are the result of such interaction. It may be that such communion and reciprocity is not direct, but takes place through the medium and instrumentality of "matter." But a medium or instrument is not necessarily either an agent or a patient. It may be perfect just in proportion as it is itself *inert,* neither increasing nor diminishing nor in any way modifying what is transmitted or effected through it. So regarded, the material world occupies an entirely secondary and subservient position; and in describing it as a mechanism we, in fact, only emphasise this, for what is a machine but an artificial means or contrivance to minister to doing?

We have next the experience of the individual subject dealing with the physical environment simply. There is here no evidence of *inter*action, such as we have where there is co-operation or conflict of man with his fellows. I only know that a certain change in the environment answers to my voluntary doing or activity, and a certain other change again to my involuntary doing or passivity. But I cannot perceive that, in the cases in which I act, my environment suffers, nor *vice versa;* if I infer these, I do so by assimilating the physical environment to myself or to the social environment, as primitive man does when he personifies sun and moon, winds and streams, fire and pestilence.

Lastly, we have the universal experience of science, in which objective changes are regarded solely in relation to each other. Here there is no direct evidence of action at all: the changes alone are directly discernible. The repeated coexistences and successions we observe among these objects confirm the anthropomorphic interpretation of them as individual things interacting after the analogy of subjects. But in reality we discover nothing but recurring conjunctions of qualities and recurring sequences of events. Moreover, the analogy which would lead us to treat such objects as individuals would require us further to assume a medium for their interaction. The environing medium of such hypothetical subjects, too, can, of course, be again resolved into hypothetical subjects of a lower order interacting in an outstanding medium, and so on indefinitely. In point of fact, common thought and language never relinquish this intersubjective analogy so long as they refer to changes as definite at all. Scientific thought, on the other hand, strenuously disavows it; though implications of it still linger in the language of science till that takes the form of equations. Meanwhile, science devises methods and elaborates conceptions, by which to resolve those variegated uniformities of coexistence and succession, from which it sets out, into one continuous and unchangeable content in space and one continuous and unalterable process in time. But neither space nor matter, neither time nor motion, affords any place for causal activity in the only form of it of which we have any immediate knowledge. Hence it behooves us to realise what most expositions of causation ignore or deny—I mean, that causation and causal uniformity are entirely distinct. An efficient cause is not necessarily uniform in its action, and uniformity of sequence does not directly imply such causal intervention.

Within the scientific scheme, then, individual things and definite acts find no abiding-place. The whole is one thing and the procession of its changes one continuous event. Such is Nature, and the course of Nature as Naturalism conceives it. But, from the way in which we have come upon this conception, we see clearly that efficient causes are not in strictness eliminated from it: the strict truth is rather that they never enter into it. There is nothing in it, therefore, that can possibly discredit that *prima facie* interaction of individual minds, of which the whole social fabric is a proof. Nor, again, is there anything that can possibly discredit that *rapport,* alternately predominantly passive and predominantly active, of each individual subject with its own environment, on which in turn intersubjective intercourse and combination depend. Such a conception of Nature, I say, cannot possibly discredit these divisions of experience; for, in the first place, it leaves them entirely aside. The conception of efficient cause lies beyond its bound: it recognises law, orderly sequence of events; but it neither asserts nor denies what we know as activity and passivity. And in the next place, the conception of Nature, so limited, cannot discredit our experience of activity and passivity, for the very existence of this conception presupposes both; first, inasmuch as it is but a formula or descriptive scheme, summarising a common objective factor of universal experience; and further inasmuch as, in being a formula or scheme at all, it is primarily—whatever validity it may have—but an ideal intellectually elaborated. And plainly, as we have seen, objects without subjects are nonsense, intellectual constructions without intellect impossible, and intellect without synthetic activity a nonentity.

WARD, JAMES, *Naturalism and Agnosticism* (London, Black [American agent, Macmillan, New York], 1915), pp. 529-532.

317

Experience a Unity

We must now look a little more closely at the conception of individuality. Usually it means that each person is unique by virtue of his physical characteristics, including what we call temperament—ultimately, perhaps, a physical matter—his innate proclivities of mind—cognitive, aesthetic, and volitional—and his character which is the outcome of the reaction of these and circumstances. But uniqueness is still more fundamental. The datum of the world of nature, as each of us knows it, is a unity of experience with its subjective and objective poles, means that this world is unique for each of us. For the subject is not passive. Adjustment is a product of two factors, the subjective and the objective. So that to the conception of individuality as a result of physical characteristics, innate proclivities, and character, we must add that the whole "choir of heaven and furniture of earth" takes on an unique quality in individual experience. It would be true to say that no two people have the same cognitive, aesthetic, or conative experience. Our point here, however, is that the physical world is unique for each of us. From the very beginning of experience nature is different for each one of us. So many men so many worlds, is an inevitable inference from experience as a unity of subject and object.

Adamson, John E., *The Individual and the Environment* (New York, Longmans, 1921), p. 42.

318

Experience Includes an Active and a Passive Element

The nature of experience can be understood only by noting that it includes an active and a passive element peculiarly combined. On the active hand, experience is *trying*—a meaning which is made explicit in the connected term experiment. On the passive, it is *undergoing*. When we experience something we act upon it, we do something with it; then we suffer or undergo the consequences. We do something to the thing and then it does something to us in return: such is the peculiar combination. The connection of these two phases of experience measures the fruitfulness or value of the experience. Mere activity does not constitute experience. It is dispersive, centrifugal, dissipating. Experience as trying involves change, but change is meaningless transition unless it is consciously connected with the return wave of consequences which flow from it. When an activity is continued *into* the undergoing of consequences, when the change made by action is reflected back into a change made in us, the mere flux is loaded with significance. We learn something. It is not experience when a child merely sticks his finger into a flame; it is experience when the movement is connected with the pain which he undergoes in consequence. Henceforth the sticking of the finger into flame *means* a burn. Being burned is a mere physical change, like the burning of a stick of wood, if it is not perceived as a consequence of some other action.

Dewey, John, *Democracy and Education* (New York, Macmillan, 1928), p. 163.

319

Time, Space, and Causality as Necessary Conditions of Experience

Previous to the formation of general ideas, sense-perception is merely the ceaseless flow of individual impressions without observed connection with one another. In fact, we do not perceive at all, strictly speaking, until we bring general ideas to the aid of our sense-impressions. For we do not perceive *things* except by combining our different sense-impressions—that is to say, uniting them by means of the ideas of Time, Space, and Causality. These three ideas are the chief among the conditions necessary *for* and are not derived *from* experience—in other words, they are not externally perceived as objects, or learned by contact with them as individual examples. We know that this is so by considering their nature, and especially by noting that they are necessary as conditions for each and every act of experience. We do not mean, of course, that we must be conscious of these ideas of time, space, and causality before any act of experience; nor would we deny that we became conscious of those ideas by analyzing experience (separating it into matter and form, time, space, and causality being the form, and the particular results the matter). What we deny is that they were furnished by sense-impressions; what we affirm is that they were furnished by the mind in its unconscious act of appropriating the sense-impressions and converting them into perception.

HARRIS, WILLIAM T., *Psychologic Foundations of Education* (New York, Appleton, 1901), pp. 44-45.

320

Experience Is Conscious Awareness

The term "experience" is used for any of life's happenings, internal or external, of which there is consciousness. Thoughts or ideas, feelings or emotions, tendencies to act and acts themselves, are interwoven in experiences. . . .

The child's experience brings to him a heterogeneous mass of impressions. From them, facts, truths, circumstances, events, principles, qualities of objects, and so forth, are learned; and with these a goodly array of actions is either involved or becomes associated. In the past the educational theorists have set forth knowledge in one form or another as the common genus in the variety of experience. But knowledge is too narrow; it does not include elements of skill, such as accuracy, facility, and efficiency in general. Knowledge and ability to use knowledge are not synonyms. We merely know we can perform certain acts, we do not know how we perform them.

ROWE, STUART HENRY, *Habit Formation and the Science of Teaching* (New York, Longmans, 1916), pp. 25, 42.

321

An Experience Always Must Be Particular

The "this" and the "mine" are names which stand for the immediacy of feeling, and each serves to call attention to one side of that fact. There is no "mine" which is not "this," nor any "this" which fails in a sense to be "mine." The immediate fact must always come as something felt in an experience, and an experience always must be particular, and in a sense, must be "unique." . . . The "this" and the "mine" express the immediate character of feeling, and appearance of this character in a finite center. Feeling may stand for a physical stage before relations have been developed, or it may be used generally for an experience which is not direct. At any time all that we suffer, do, and are, forms one psychical totality. It is experienced all together as a co-existing mass, not perceived as parted and joined by relations even of coexistence. It contains all relations, and distinctions, and every ideal object that at the moment exists in the soul. It contains them, not especially as such and with exclusive stress on their content as predicted, but directly as they are and as they qualify the psychical "that." And again any part of this co-existence, to which we attend, can be viewed integrally as one feeling.

Now whatever is thus directly experienced—so far as it is not taken otherwise—is "this" and "mine." And all such presentation without doubt has peculiar reality. One might even contend that logically to transcend it is impossible, and that there is no rational way to a plurality of "this-mine." But such a plurality we have agreed for the present to assume. The "this," it is, however, clear, brings a sense of superior reality, a sense which is far from being wholly deceptive and untrue. For all our knowledge, in the first place, arises from the "this." It is the one source of our experience, and every element of the world must submit to and pass through it, and the "this," secondly, has a genuine feature of ultimate reality. With, however, great imperfection and inconsistency it owns an individual character. The "this" is real for us in a sense in which nothing else is real.

BRADLEY, FRANCIS HERBERT, *Appearance and Reality* (London, Allen [American agent, Macmillan, New York], 1916), pp. 223-225.

322

Aristotle on Experience and Science

"In actually achieving results experience is apparently not inferior to science. On the contrary we often find men of experience more successful in reaching their aim than men who have the theory without the experience. The reason for this is that experience is knowledge of individual cases, whereas science is knowledge of universal principles, and every action and every creative process has to do with individual cases. For example, the physician does not heal mankind, except incidentally, but rather Kallias or Socrates or some other similar individual who happens, to be sure, also to belong to the *genus homo*. If, then, one possesses the theory without the experience, and has a knowledge of the general principles, but does not know how to apply them in the individual case before him, he will very often make a mistake as to the cure required; for it is always the individual case that is to be cured.

Nevertheless we think that knowledge and understanding are properties of science rather than of experience, and we hold men of science to be wiser than men of experience on the ground that in every case wisdom is to be ascribed to one in proportion to the extent of his knowledge. And the reason why we do this is because the former know the reason why, the latter do not; men of experience know the fact, men of science know the wherefore of the fact. . . .

In general the mark of knowledge is ability to impart what one knows to others; and this is why we hold science to be a higher form of knowledge than experience, men of science being able, men of experience being unable to impart their knowledge to others."

BAKEWELL, CHARLES MONTAGUE, *Source Book in Ancient Philosophy* (New York, Scribner, 1907), pp. 218-219.

323

What Experience Means

Now the first thing to make sure of is that when we talk of "experience," we attach a definite meaning to the word. *Experience means experience of something foreign supposed to impress us,* whether spontaneously or in consequence of our own exertions and acts. Impressions, as we well know, affect certain orders of sequence and coexistence, and the mind's habits copy the habits of the impressions, so that our images of things assume a time- and space-arrangement which resembles the time- and space-arrangements outside. To uniform and outer coexistences and sequences correspond constant conjunctions of ideas, to fortuitous coexistences and sequences casual conjunctions of ideas. We are sure that fire will burn and water wet us, less sure that thunder will come after lightning, and not at all sure whether a strange dog will bark at us or let us go by. In these ways experience moulds us every hour, and makes of our minds a mirror of the time- and space-connections between the things in the world. The principle of habit within us so *fixes* the copy at last that we find it difficult even to imagine how the outward order could possibly be different from what it is, and we continually divine from the present what the future is to be. These habits of transition, from one thought to another, are features of mental structure that were lacking in us at birth; we can see their growth under experience's moulding finger, and we can see how often experience undoes her own work, and for an earlier order substitutes a new one. *"The order of experience"* in this matter of time- and space-conjunctions of things is thus an indisputably *vera causa* of our forms of thought. It is our education, our sovereign helper and friend; and its name, standing for something with so real and definite a use, ought to be kept sacred and encumbered with no vaguer meaning.

James, William, *Principles of Psychology* (New York, Holt, 1890), Vol. 2, p. 619.

324

The Individual and His World Are One

We have so far used language which implies that the individual and the world he is to be adjusted to, whether natural, social, or moral, are two separate and distinct things; and that adjustment means bringing them together and fitting them to one another. We have done so in order to keep to the tracks of every-day thought. We must now leave them and take up an exactly opposite standpoint. We take as our point of departure the fact that the individual and his world are one. That is just what is meant by experience. It is a unity within which the individual and his world occupy the subjective and objective poles; but it is one and not two, save in the sense that the two, the subject and the objective continuum, the individual and his world, are complementary to each other, in the same way as the biologist regards an organism and its environment as complementary. . . . The term presentation, like the term experience, implies a unity in which subject and object meet; but it differs from experience in being confined to cognition, while experience implies affective and conative elements as well. Experience is the common ground of the individual and world he knows, feels, and acts upon; and it is one before it is two, not *vice versa.*

The child only gradually distinguishes itself from other objects as the consciousness of the self develops; similarly, *avant l'homme est la société;* and similarly again it is out of the objective moral order that individual morality by a process of recreation emerges.

Adamson, John E., *The Individual and the Environment* (New York, Longmans, 1921), pp. 6-7.

325

Why Science Is More Popular Than Philosophy

Science speaks in the native tongue of common sense; philosophy in unfamiliar accents that shock and mystify.

The explanation of this lies in the fact that *science and common sense agree in unconsciously accepting a classification or map of experience which it is the business of philosophy consciously to criticize.* This map or classification is sometimes referred to as "the natural world-order." In this order, *a thing is a body, and the world is the spacial field and temporal sequence of bodily events.* The instance, case, example, which a word denotes, is always some individual body or group of bodies—occurring somewhere, at some time, and capable of being identified beyond doubt by gesture or manipulation. To think in these terms is the habit of common sense, and the method of science. . . .

Common sense and science (the one unconsciously, the other with an increasing degree of consciousness) thus move within the same limits. They share the same unreflective classification of experience, employ the same axes of reference, have the same notion of an individual thing. This is thought's original sin, its inertia and line of least resistance. It is responsible for the sympathy between common sense and science; and for the somewhat strained relations between both of these and philosophy, whose business it has ever been to remind them that their favorite assumption is uncritical and dogmatic.

Perry, Ralph Barton, *Present Philosophical Tendencies* (New York, Longmans, 1929), pp. 49-51.

326

Uniformity of the Texture of Experience

If I understand Kant rightly—which I admit to be very problematical—he holds that in the act of experience we are aware of space and time as ingredients necessary for the occurrence of experience. I would suggest—rather timidly—that this doctrine should be given a different twist, which in fact turns it in the opposite direction—namely, that in the act of experience we perceive a whole formed of related differentiated parts. The relations between these parts possess certain characteristics, and time and space are the expressions of some of the characteristics of these relations. Then the generality and uniformity which are ascribed to time and space express what may be termed the uniformity of the texture of experience.

The success of mankind—modest though it is—in deducing uniform laws of nature is, so far as it goes, a testimony that this uniformity of texture goes beyond those characteristics of the data of experience which are expressed as time and space. Time and space are necessary to experience in the sense that they are characteristics of our experience; and, of course, no one can have our experience without running into them. I cannot see that Kant's deduction amounts to much more than saying that "what is, is"—true enough, but not very helpful.

But I admit that what I have termed the "uniformity of the texture of experience" is a most curious and arresting fact. I am quite ready to believe that it is a mere illusion; and later on in the paper I suggest that this uniformity does not belong to the immediate relations of the crude data of experience, but is the result of substituting for them more refined logical entities, such as relations between relations, or classes of relations, or classes of classes of relations. By this means it can be demonstrated—I think—that the uniformity which must be ascribed to experience is of a much more abstract attenuated character than is usually allowed. This process of lifting the uniform time and space of the physical world into the status of logical abstractions has also the advantage of recognising another fact, namely, the extremely fragmentary nature of all direct individual conscious experience.

My point in this respect is that fragmentary individual experiences are all that we know, and that all speculation must start from these *disjecta membra* as its sole datum. It is not true that we are directly aware of a smooth running world, which in our speculations we are to conceive as given. In my view the creation of the world is the first unconscious act of speculative thought; and the first task of a self-conscious philosophy is to explain how it has been done.

There are roughly two rival explanations. One is to assert the world as a postulate. The other way is to obtain it as a deduction, not a deduction through a chain of reasoning, but a deduction through a chain of definitions which, in fact, lifts thought on to a more abstract level in which the logical ideas are more complex, and their relations are more universal. In this way the broken limited experiences sustain that connected infinite world in which in our thoughts we live. There are three more remarks while on this point I wish to make—

(i) The fact that immediate experience is capable of this deductive superstructive must mean that it itself has a certain uniformity of texture. So this great fact remains.

(ii) I do not wish to deny the world as a postulate. Speaking without prejudice, I do not see how, in our present elementary state of philosophical advance, we can get on without middle axioms, which, in fact, we habitually assume. My position is, that by careful scrutiny we should extrude such postulates from every part of our organised knowledge in which it is possible to do without them. Now, physical science organises our knowledge of the relations between the deliverances of our various senses. I hold that in this department of knowledge such postulates, though not entirely to be extruded, can be reduced to a minimum in the way which I have described.

We note again that the relational theory of space from another point of view brings us back to the idea of the fundamental space-entities as being logical constructs from the relations between things. The difference is, that this paragraph is written from a more developed point of view, as it implicitly assumes the things in space, and conceives space as an expression of certain of their relations. Combining this paragraph with what has gone before, we see that the suggested procedure is first to define "things" in terms of the data of experience, and then to define space in terms of the relations between things.

I emphasise the point that our only exact data as to the physical world are our sensible perceptions. We must not slip into the fallacy of assuming that we are now comparing a given world with given perceptions of it. The physical world is, in some general sense of the term, a deduced concept.

Our problem is, in fact, to fit the world to our perceptions, and not our perceptions to the world.

Whitehead, Alfred North, *The Aims of Education* (New York, Macmillan, 1929), pp. 244-247.

327

The Universe of Our Experience

The reason why physical realism has made such a wide appeal to the modern world is that it seems to furnish us with an objective reality, the same to all men, and corresponding to our conception of what an objective world should be. It is true that Berkeley and Hume showed by reasoning which has never been shaken that if the physical world were real in the sense assumed by Newton, we could never come to know of its existence. That world, however, seemed so imposing that little heed was paid to the scepticism of Berkeley, and still more thorough scepticism of Hume. It required a deeper analysis of experience, in which the first great step was taken by Kant, and further very important steps by Hegel, to meet Hume's scepticism. Any form of so-called idealism, however, failed to meet the criticism that it does not furnish an objective world. I have tried to meet this criticism by carrying the analysis of experience still further, so as to reach a form of realism which is proof against the objection to any form of physical realism, and yet accounts for the fact that physical, biological, artistic, and ethical interpretations appeal to all men, just as if each of these interpretations represented an objective world.

Neither are interest and values centred in ourselves as individuals, nor are there any spatial or temporal limits to them. Time- and space-relations express them instead of limiting them. But in what sense can we regard them as existing objectively and the same for all? However important they may be, they seem to clash with one another and to lead to competition, quarrels, and war. They undoubtedly do so, but the contests and disagreements are only the process of realization of interest, and when a stable decision is reached there is a wider or more detailed expression of interest and values. It is only through effort and struggle that values are maintained and developed.

Owing to the confusion produced in our minds by the assumption presented to us in modern times as being nothing but "common sense," that the world as described in terms of physical science is a real world, we seem forced to the conclusion that however important may be the interest and values which we perceive immediately around us, they are limited in their existence by a vast outside physical universe, surrounding us both in space and time, or in space-time. I have already pointed out the reasons for the conclusion that this physical conception of a universe is by itself a mere make-believe. In other words, the conception, though of the greatest use for certain limited practical purposes, is not in itself consistent with our actual experience. Here I touch on the very kernel of what I am maintaining in this course of lectures. There is no mistaking the issue. The conclusion forced upon me in the course of a life devoted to natural science is that the universe as it is assumed to be in physical science is only an idealized world, while the real universe is the spiritual universe in which spiritual values count for everything.

The apparent individual interests and values in this spiritual world turn out, when we examine them, to be not separable interests, but one interest, with its values organically united with one another in time-relations as well as space-relations; and the perception of this is never far off. This perception guides us towards honest, diligent, unselfish, and charitable conduct, and is the motive impulse of all that we regard as being best in our actions. It gives us width of intellectual vision, courage to act, courage to endure, inspiration to carry forward what we have inherited from those before us, and charity. We live, if we will only realize it, in the presence of, and through the power of, this spiritual reality. It is the inspiration of all the splendid and painstaking effort which has built up our language, our literature and art, our science, our institutions, our machinery of all sorts, our loyalty to one another, and all that we call civilization.

If we look far enough backwards in the ideal time-relation of physics or outwards in the corresponding ideal space-relation, we may lose its detail, but it is still there; for the stars are to us like old friends whose presence around us is an expression of spiritual reality. We also do and can see it all around us in our daily lives, and apart from its existence our conscious experience or behaviour is entirely unintelligible or inconsistent with itself.

It is equally true that within the world of our daily observation we cannot trace the spiritual world of values in detail. What we see in detail is frequently what we can only attempt to describe in the abstract terms of physical science. In other words, we can only see the spiritual world partially and in outline, so that it seems to us to be only imperfectly real. Yet if we conclude that there is a real material world—a physical world of mechanical chaos—which limits the spiritual world of values, this cannot be correct: for the supposed physical world is part of the perceived world, and this is inconsistent with its being a real world. The faith that in spite of our blurred vision of it the real world is one spiritual world cannot be shaken.

It is thus only an imperfectly revealed spiritual world that we had taken for a material world; and so the world of our experience is a progressive realization of the spiritual world.

This gives us a new conception of time, not as a mathematical entity, but as the progressive realization of one spiritual reality, involving space-relations as well as all other relations which make up an ordered world of values. However useful the ordinary Newtonian conception of time may be, it is no longer, even for physicists, more than an ideal creation, as was pointed out in the fourteenth lecture. For the historian of conscious behaviour, Newtonian time or Einsteinian space-time is only an ideal abstraction. For a true historian or scholar or man of science the past of his subject is not something done with, but revealing itself in the present and future, which in their turn only reveal themselves as the outcome of the past. The physical conception of time or space-time is only a tool to be used for certain practical purposes. Let us use it efficiently for these purposes, but not regard it as anything more than a tool.

It is of its very nature that the universe of our experience—the universe of perception and conscious behaviour—must be a spiritual world of interest and values, and that the interest and values are not merely subjective, or those of a particular individual, but objective, since all can enter into them, and there is nothing outside them in our experience. In them the whole of our experience is unified as the active manifestation of one spiritual universe.

All around us we seem to see physical chaos, death, disease, decay, selfishness, and war between interest and interest, between man and man, or beast and beast. We certainly cannot see in detail how the picture which they present can be reconciled with the conception of a spiritual universe. It is only by faith that the reconciliation appears to us—the faith that our universe is consistent with itself. This faith is of the same nature as that which guides and inspires the work of pure science in its fight with ignorance and unintelligibility. Science is a continuous human struggle with what is as yet unintelligible, and this struggle is its very life. The petrified science of an inferior text-book is not science at all. In a far wider sense the whole of our experience, when we rightly comprehend it, is an active struggle in which we are continuously realizing the living and active spiritual unity which is without and within us everywhere in space and time, though it is only through the inference which we call faith that we know that it is being realized. The reality of this active spiritual unity sums up for us the message of philosophy.

We are to be pitied if we have lost our faith, lost sight of our spiritual continuity with the past and future as well as with what is around us, so that we only seem to be engaged in a hopeless or selfish struggle which will end with our deaths. Philosophy bids us to look again, and shows us how to look. She does not bid us to shut our eyes to the apparent evil within and around us, but tells us that in the effort of facing and dealing with it according to our abilities we become one with Supreme Active Reality.

HALDANE, J. S., *The Sciences and Philosophy* (New York, Doubleday, 1930), pp. 258-263.

CHAPTER XIV

Psychology and Education

THIS is not a chapter on educational psychology in the commonly accepted sense of the term. The author recognizes and appreciates the fact that a great deal of valuable scientific work in education has been and is now being done by psychologists. This statement applies especially to the fields of method and measurement.

The purpose of this chapter, however, is to present a critical estimate of a type of mechanistic psychology which is taught today, and which underlies much of our educational theory and practice. What is known as behaviorism furnishes probably the best example of a purely mechanistic psychology. From the point of view of philosophy of education, which is in reality a philosophy of life, the writer is fully in accord with the statement of Chapman and Counts quoted in the chapter (348). These authors recognize the value of behaviorism as a methodology for the scientific investigation of the habit processes, but reject it as a theory covering all aspects of human experience. Surely "A philosophy of education must not be held in bondage by its servant, behaviorism."

The chapter opens with a quotation from J. S. Haldane, an eminent physiologist and great philosopher. Students should carefully read this statement as well as the other quotations from the same author (331, 350, 353). McDougall gives a critical estimate of mechanistic psychology (332). Other selections which will be of special interest to students are 330, 334, 337, 343, 347, 351, 352. If the chapter helps to develop a more critical attitude on the part of students toward some of the things taught today in psychology and education, the writer's main purpose will be fulfilled.

328

Physiology and Psychology

Much of the most valuable part of our physiological knowledge results from the observation of activities of which we are conscious. In making these observations we deliberately disregard or abstract from the whole psychological aspect of the phenomena: we even take special precautions to exclude psychical interference. In this way we observe and analyse the physiology of the sense-organs, muscular movements, breathing, the intake of food and drink, etc. The methods used are exactly the same as if we were investigating something which is outside of direct conscious control, such as the circulation, or the secretion of urine; and it is a complete mistake to describe as psychology any such investigation in which we are observing something of which we are conscious. Psychology deals with personality, and observations from which all that is distinctive of personality is rigidly excluded have nothing to do with psychology. Conversely, psychological investigation has no place in physiology. The physiologist who treats of perception and volition is going outside his own subject, and sometimes does so in a quite illegitimate manner, endeavouring to state or explain psychological phenomena in terms of a conception which cannot be applied to them because it cannot describe them.

The man as a person is more than the man as an organism; but we must not make the mistake of supposing that he is anything different from his organism perceived and understood more fully. It is absolutely vain to attempt to separate in any other sense the personality of the man from his organic life. His character is, on a lower plane of our perception, organic character; his passions, on this plane, are mere organic instincts. To separate off the organic instincts as if everything connected with them were outside the man's real personality is to make the same kind of mistake as is made by the vitalists in physiology. The love between parent and child, or man and woman, may be looked upon, by those who are not attempting to see further into reality, as mere organic instinct; but in nothing else does personality in its distinctive sense manifest itself more clearly, and through nothing else can character be judged more certainly. The person is the whole man, and the organic aspect of him is only an abstract or partial aspect.

Haldane, J. S., *Mechanism, Life and Personality* (London, Murray [American publisher, Dutton, New York], 1914), pp. 120-122.

329

Everything Relating to Man Has a Psychological Element in It

All activities of man have an internal or mental side, even when they are directed upon the external world. There is a mental or subjective coefficient as well as an objective one. The mind acts and reacts in all manner of human needs. Hence everything relating to man has a psychological element in it and is so far educative. There is a psychology to sociology and to individual biography. There is a psychology of the family, the industrial community, the state, the church, and also of the school. There is a psychology of each branch of study—grammar, arithmetic, history, poetry, art, philosophy. The business of psychology is to find this subjective coefficient wherever it exists. Educational psychology deals with all phases of the action and reaction of the mind by itself or in the presence of objects, by which the mind develops or unfolds or is arrested, or degenerates.

Harris, William T., *Psychologic Foundations of Education* (New York, Appleton, 1907), p. 14.

330

Conflicting Schools of Psychology

The schools of psychology are as numerous and conflicting as the schools of philosophy and for much the same reasons. Structuralists hold that mind is to be understood in terms of its constituent simple elements; functionalists find understanding not in elements but in process and adjustment. Freudians would explain the conscious in terms of the unconscious; some physiological psychologists would explain it as caused by the nervous system. Extreme behaviorists would deny or ignore consciousness entirely and would study only the reactions of the physiological organism. Persons rejoicing in the designation of epiphenomenalists would admit that there is consciousness, but would hold that it causes nothing and is of no explanatory value. These persons seem to lack the courage either to be thorough behaviorists or, on the other hand, to treat mind seriously. Germans have developed a new point of view, called the Gestalt-psychology, which holds that experience does not consist of simple elements, as structuralists believe, but of configurations called Gestalten, which can only be understood as wholes. Still other psychologists see in purpose or striving for an end the basic nature of mind and the key to its explanation, as opposed to the mechanism of many other theories. Others, again, emphasize the fact that all consciousness belongs to some self, and that this is the most important feature of mind. The last three types have much in common. But it cannot be said that there is any agreement on what mind really is or how its unity is to be understood.

All of the difficulties in observing and explaining mind combine to drive home the truth that both the laws and the methods of science should be derived from the subject-matter studied, and not from preconceptions, even those acquired through the study of other sciences. Mind is mind; and the student of mind should take mind as he finds it. If so taking it he has to depart from the methods of other sciences, he need not be disturbed. If his investigation should have to be so many-sided and unique that his study turned out to be very unlike other sciences, he may as well face the facts. It may be that a science of mind, in the strict sense, is impossible because science is always abstract, while mind is the most concrete of objects. It is concrete not as being visible to the senses, but as being a rich system of connected experience. Hence W. E. Hocking remarks that "a kind of metaphysical psychology is the only satisfactory science of the mind." Philosophy, and not science, aims to apprehend the full concrete meaning of life.

BRIGHTMAN, EDGAR SHEFFIELD, *A Philosophy of Ideals* (New York, Holt, 1928), pp. 6-7, 12.

331

Psychology Deals With Conscious Experience

Psychology represents a distinct branch of knowledge, in which our experience is interpreted, and can only be interpreted, as the embodiment of personality. This interpretation, however, is never complete in detail, and always leaves scope for relatively imperfect physical or biological interpretation—imperfect because in physical or biological interpretation we cannot take into account, or only take into account very imperfectly or abstractly, the fact that experience is conscious experience. If we attempt to reduce psychological to physical or biological interpretation, either wholly or partly, the result is hopeless confusion. Individual or group psychology, moreover, implies what leads directly to religion.

The account given in this essay of the foundations of psychology is fundamentally at variance with the materialistic assumptions on which a great part of popular psychology is at present based. These assumptions are not consistent with the nature of conscious experience.

HALDANE, J. S., *Materialism* (New York, Harper, 1932), pp. 111-112.

332

Mechanistic Psychology Examined

Watson's observation in young infants of only three complex reactions, kicking, squealing, and smiling, hailed by a multitude of iconoclasts as a great discovery, has *no bearing on the question it is supposed to have settled in the negative,* the question of the instinctive basis of human nature. The same method applied to young birds would "prove" that birds also have no instincts, no instinct to mate, to build, to sing, to migrate. And his claim to know how to produce to order and in unlimited quantity every type of genius is preposterous.

To sweep aside all the immense mass of evidence of the instinctive basis of human nature, accepted in all other countries by the highest authorities from Darwin to Freud; to pretend to close the door on all the fundamentally important problems of racial and individual peculiarities of mental constitution, just when these problems are becoming the center of interest of European psychologists; to pretend to have finally established the long discredited doctrine of the *tabula rasa;* and all this on the flimsy basis of a few negative observations of young infants; this, I say, is a degree of childish presumption that could not flourish for a moment in any other country than America.

The second leg of the tripod, the theory that all learning, all intelligent adaptation of action, is the acquiring of conditioned reflexes is more respectable. The work of Pavlow and his colleagues is deserving of all praise. But the conditioned reflex, though it is a reality, is something very different from an intelligent adaptation. The conditioned reflex is built up gradually by many repetitions: twenty is the minimum, and the number often runs above a hundred. And, if the conditions under which it is provoked be a little modified, it ceases to be manifested and seems rapidly to lapse. On the other hand, the intelligent adaptation, whether of man or animal, is often effected by a sudden flash of insight; and once achieved is likely to be repeated indefinitely under a widely varying range of similar circumstances, and with wide difference of means employed.

The first leg of the tripod, Thorndike's theory that intelligent adaptation is a perfectly random process, a happy conjunction of movements occurring accidentally among a series of such movements, this theory, though it has dominated American psychology for nearly thirty years, has not remained uncriticized. Professor Yerkes, the most distinguished and prolific worker in animal psychology in America, has never accepted it and has shown in much of his work its illusory nature. Professor Kohler of Berlin, in his celebrated study of chimpanzees, has shown very clearly that it is not true of them. Professor Spearman of London has marshaled a vast array of experimental evidence to show that the theory will not apply to man, and has forced Professor Thorndike very near to an admission of the fact.

But it has been reserved for a young graduate, Dr. D. K. Adams, to deal the theory its *coup de grâce* by showing that the alleged facts on which Thorndike based the theory were fallacious observations and interpretations. This he has done by repeating Thorndike's original experiments, observing with an open mind, and varying the conditions in such a way as to allow the subjects of the experiments an opportunity to use what intelligence they possess. Three years were devoted to this work in the psychological institute of Yale University, other allied forms of experiment being added. Neither Dr. Adams' procedures nor his conclusions can here be stated in full. It must suffice to cite: "The experiments of Thorndike upon cats are examined and found to be inadequate to the conclusions drawn from them." Further, "the puzzle-box technique, as used by Thorndike and myself with the subject inside, has slight utility for the study of adaptive behavior." And in general Adams comes to the conclusion that the animal's success depends upon *insight* into the puzzle-situation and upon *foresight* of the goal to be achieved. "All learning may be said to involve the representation of the ends of acts at moments before their actual occurrence."

Dr. Adams' fatal blow to the foundation of the *sarbon* theory has been quickly followed by another, hardly less destructive of it. To the International Congress of Psychologists (gathered at Yale University in September, 1929) Dr. K. S. Lashley, one of the highest authorities on the functions of the nervous system, presented an address as president of the American Psychological Association. Founding his conclusions upon a long series of very careful experiments on the brains of animals, he told the assembled psychologists that the reflex-action theory of all cerebral activity, which has so long been very generally accepted, must now be rejected, that all views of cerebral function are now in the melting pot and must be completely revised.

Thorndike's conclusions, which for a whole generation have been the main foundation of the *sarbon* theory, are thus finally exposed as fallacious. The theory that man is a machine is left without a single leg to stand upon; it remains floating upon a cloud of metaphysical prejudice, upon the assumption that all events are mechanical. This assumption, in order to avoid the appearance of metaphysical prejudice, is sometimes stated in a rather different form. It is said that, whatever the real nature of the events we observe about and within us, Science can deal with them effectively only by assuming them to conform to the mechanistic type. To this contention we reply by asking for the warrant for this dogmatic assertion, and pointing out that mechanistic biology has come to a deadlock and finds itself in a blind alley, from which it can escape to make new progress only by recognizing that biological events are essentially teleological. In insisting on the teleological or goal-seeking character of biological events, I do not mean that they are teleological in the sense in which Paley regarded a time-piece as teleological, the sense in which every man-made machine is teleological, but rather in the sense that in the living organism events occur according to that order which we apprehend most clearly in our own mental activities. In other words, in all living organisms something of the nature of Mind is immanent; our own mental activity is the highest expression directly revealed to us of a mode of activity which pervades all levels of the realm of life in their various degree.

I have already suggested that, when the theory that man is a machine and nothing more is successfully propagated throughout the mass of a people, we must expect disastrous results. Such a belief cannot fail to weaken, if not to abolish, the sense of individual responsibility, to spread abroad a sense of the futility of all higher forms of effort, to make the enjoyment of the pleasures of sense seem the only acceptable philosophy of conduct; in short, to engender a moral materialism. It remains to point to some of the deductions from the machine theory and to their influence upon our social problems and activities.

Behaviorism, as taught in a large proportion of American colleges and as represented by Dr. J. B. Watson and his many followers, is not content to figure as an abstract scientific doctrine. Rather, it draws its practical deductions and actively urges them upon a credulous public. I will refer only to three of the many spheres in which its influence is already great.

It openly and confidently treats all religion as mere illusion and superstition surviving from the prescientific age, and seeks to close the door to all further thought or inquiry in that direction.

In the sphere of domestic life its deductions are boldly applied. And here it does not hesitate to take over from the utterly incompatible teachings of the Freudian school whatever is most disturbing and destructive to traditional belief and practice. Tradition holds that the monogamic family is the foundation of the State and the institution most necessary and conducive to human welfare, happiness, and progress. Behaviorism attacks it at every point. The relations between man and woman it would reduce to nothing more than one means for securing sensual gratifications; and those relations between the sexes are best which will produce the maximum amount of such gratification. Romantic love, marital fidelity, and pre-marital chastity for either sex, all these become absurd and pernicious survivals. Watson has foretold that within fifty years marriage will have ceased to be an American institution; and there can be little doubt that if his theory of human nature could be shown to be true, or if, in spite of its falsity, it should continue to spread as it has spread in the last decade, his forecast will be realized.

Some of those who, like Mr. and Mrs. Bertrand Russell, advocate complete sexual license, still regard the cohesion of man and wife as desirable in the interests of their children, or rather of the children born by the woman. But Watson will sanction no such old-fashioned nonsense. He has taken over from Freud the most regrettable and fallacious parts of his teaching, the theory of the *Œdipus complex,* and the dogma that all affection is a sexual manifestation; and he gives to these dogmas the peculiarly objectionable twist that the affection of a child can only be gained by stimulation of its sexual nature. For these and other reasons he regards the influence of parents and especially of the mother as peculiarly and inevitably pernicious to the child; and seems to hope to see all children brought up in State-supported behaviorist laboratories. Thus the American child, who too often is already, through lack of wise parental care and companionship, a hard self-seeking individualist, is in danger of being made into a ruthless savage wholly given up to the pursuit of material goods and pleasurable excitements.

Finally, the teaching that the feelings and emotions are utterly negligible cannot fail to have a brutalizing effect. It is notorious that in some of the European countries such teaching in regard to animals has made the people utterly callous to the sufferings of animals. Behaviorism confronts a more difficult task when it attempts to eradicate all kindly sympathy from American minds; yet, in proportion to its prevalence, it will not wholly fail of its natural effect in this direction. In short, it is both a product and a prime agency of that mechanization of human life which all Europe recognizes and dreads as of the essence of Americanization. "The next move in the advance of our civilization," writes the English author of a recent book,[1] "must be a campaign against the mechanization of life."

McDougall, William, in *Behaviorism—A Battle Line* (King, W. P., editor; Nashville, Cokesbury, 1930), pp. 48-56.

---

[1] Booth, Meyrick, *Woman and Society* (London, 1923).

333

Our Choices Determine Our Destiny

Our chief difficulty is not so much with the facts that psychology presents, or even with the theories by which some psychologists try to account for them, as with our emotional reaction to the way the facts and theories are presented. So long as determinism remained a doctrine of the philosopher or the theologian, the practical man could pass it by. But when scientists begin to talk determinism, it is a different matter. Science has for many of our contemporaries an authority greater than that of the Pope, and before its verdict, real or supposed, they bow with an unlimited surrender. If science tells us that our actions are determined, then, they conclude, it is no longer possible for us to hold ourselves responsible for what we do. So we find them associating the new view of the self now with a doubt that inhibits action, now with an indifference that obliterates all moral distinctions, and it is difficult to know which association has the more disastrous effect. . . .

The important thing is not what theory of the will we adopt but what practical consequences we draw from it. As a philosopher, the psychologist may hold whatever theory of the will seems to him most reasonable; as a man of science it is his function to point out how choices come about in experience and what we can do to fit ourselves to choose more wisely and more effectively. And the word that he has for us to-day is the word of the great religious teachers of all ages; that however we explain the fact, we are captains of our souls and that our choices will determine our destiny.

Brown, William Adams, *Beliefs That Matter* (New York, Scribner, 1928), pp. 39-40.

334

Consciousness and Behavior

The term consciousness has played such an important part in psychology and philosophy, precisely because it was *not* recognized as behavior. Traditional and popular psychology regard consciousness as a psychical entity which spontaneously controls the activities of individuals. The widespread interest in consciousness or mental states is based upon the practical consideration that an analysis of consciousness will help the individual to control his own or others' behavior. If it can be demonstrated that so-called consciousness does not do this, that no psychical entity has even been isolated, and that what we have been regarding as conscious effort is only the functioning of obscure contractile elements, which in turn stimulate adjacent receptors that release the verbal overt response, "I have such and such sensations, images, and feelings," the whole significance of the term consciousness falls to the ground. It no longer controls behavior, it is only one of the many by-products of the socially important responses.

The only way to control behavior is through the biosocial stimulating conditions which precede the formation of given groups of activities. The big problem at present is to find out what these biosocial conditions are; preceding even this is the problem of actually defining and classifying the behavior categories. Consciousness as a non-physical, spontaneous, self-initiating form of energy does not exist. Consciousness as an implicit form of behavior or as an obscure physico-chemical process is best described as behavior. Such other subjective terms as volition, perception, reasoning, emotion, conception, ideation, etc., regarded as various conscious complexes, are, of course, no more descriptive of biosocial and sensori-motor conditions than the term consciousness itself. The writer has made several attempts to carefully work out the behavior equivalents of the more important traditional psychological terms, but implicit reactions and subvocal speech seem to explain everything. Any attempt to be more specific immediately raises the question, what is the meaning of the psychological term? and here the analysis or synthesis stops in a tautology. For instance, it is said, that the minds of the laborers are inferior to those of the bankers of the community. In terms of behavior this means that if the bankers of the community were assigned the tasks of the laborers (assuming equal physical strength) the bankers would do the work better than the laborers. On the other hand, if the laborers were assigned the bankers' tasks (assuming equal training) the laborers would not do the banking as well as the bankers. The differences in ability are said to be due to mental differences, but this is merely a reiteration of the fact that there is a difference. Of the biophysical and biosocial antecedents that are the actual causes of the differences we know next to nothing, and the pseudo-explanatory character of the phrase "differences in mentality" actually obscures the fact that we have only stated a problem, not explained one. In general, the individuals that excel in the community are said to have the best minds, but of course, this is merely a reciprocal statement for the fact that they excel.

Frequently the term mind is used as a subterfuge to cover up the very important fact that for almost any form of behavior that may be mentioned, no one is able to indicate or describe the essential biosocial antecedents through which this particular form of behavior may be established in a normal individual. We have text-books, school projects, course sequences, the elective and prescribed course system; we have large classes or small classes, supervised study, and none at all. All of these in some obscure manner are supposed to act on a still more obscure mind.

WEISS, ALBERT PAUL, *Theoretical Basis of Human Behavior* (Columbus, Adams, 1929), pp. 272-274.

335

Organic Behavior a Unified Totality

In modern educational writings one frequently meets with a warning to avoid a logical and favor a psychological method of teaching. What is meant by this warning is that the development of a subject in accordance with the principles of formal logic—by classificative definition, and reasoning—can be understood only by those who already know their logic. A child, on the other hand, who is still acquiring the data upon which these principles rest, and who can therefore not yet realize them abstractly, must be led into a subject of study by a more natural route, that is, through a psychological rather than a logical method of developing the subject.

Unfortunately, sound as this advice is, we know as yet too little of the psychology of childhood to be able to apply it successfully and understandingly even in those instances where we are most insistent upon its application. For the logic we need in the instruction of the young is biological rather than formal; and, though formal logics have been written again and again since the classic work of Aristotle, no one has yet written the more fundamental and far more important bio-logic which education requires. Thus it happens that the fallacy of chained reflexes, together with all the devastating implications which this theory has for behavior, rests upon a purely formal attempt to reduce that which means or implies complexity into that which means or implies simplicity; whereas science must concern itself first of all with facts, rather than with meanings and implications.

The most important aspect of a mode of organic behavior at any time or place is its unified totality. The whole man, the whole insect, or the whole coelenterate: these are the primary agents of response, all partial responses which analysis may reveal being subsidiary to and dependent upon the fully rounded dynamic character of the total-response. Instead of saying that instinctive and other forms of behavior are a sum of reflexes chained together by a process of accretion which works either in the process of evolution or through the formation of specified habits, we should say just the reverse; namely, that a total, vague, and undifferentiated response becomes, through a creative effort, differentiated and discrete. Out of the whole generate the parts; out of a primordial diffuse total-response come both instincts and reflexes through racial development, and likewise all habits and voluntary responses through individual development.

Ogden, Robert M., *Psychology and Education* (New York, Harcourt, 1926), pp. 21-22.

336

The Conditioned Response a Triumph for Experimental Psychology

But the chief value of the experimental work on conditioning lies in the fact that it has made the educators of children analyse out the elements of the situation and response (S—R) which led to their association, and also made them much more sensitive to the extreme delicacy of the mechanisms used in the learning processes. We now know that very soon after birth the unconditioned bonds of children become conditioned in hundreds of ways. These new bonds we call conditioned responses and, later, habits or learning. The education of the child is largely a process of acquiring in the first place conditioned reflexes, and then the more permanent associations and systems of conditioned reflexes that we call habits. Individual differences with respect to intellectual ability and emotional stability are largely due to the ease with which conditioned responses are formed and broken. In the well-endowed children these associations are easily made and re-made; in the feeble-minded, as Miss Mateer has shown, they are both difficult to form and to re-form. Feeble-minded children learn and unlearn with great difficulty, while the normal, and especially the super-normal children, retain a plastic condition of the nervous system for the greater part of their lives. Finally, children (and adults as well) are usually unaware of the stimuli to which they become conditioned. Most of the conditioned responses we learn can never be introspected, and had it not been for the objective studies of Pavlow and Watson we should have remained in ignorance of them to this day. The conditioned response, therefore, is a triumph for experimental psychology. It is remaking the whole field of learning and emotion.

SANDIFORD, PETER, *Educational Psychology* (New York, Longmans, 1929), p. 180.

337

Identities More Fundamental Than Differences

It is extremely misleading to speak of the growth of a human being in terms that only befit the construction of a factory. Personality is not an artifact, that it should be described after this manner. The child is born, not made. And his development proceeds, not by additions from without, but by unfoldings from within; not by mechanical accretion, but by vital and dynamical self-realization.

It seems to me quite possible, moreover, to lay an exaggerated emphasis upon the differences between children and adults. It is quite true, of course, that these differences are great and striking, but they are differences of degree rather than of kind, and they are underlaid by far more fundamental identities. It is quite true that the babe and the man differ widely in respect of the relative size and weight of the various parts and organs of the body. It is quite true that the food taken into the system serves, in the one case, for the repair of waste, while in the other it goes also to the formation of new tissue and the augmentation of energy. It is also quite true that the mental attitude of a child seems in some cases to be such that adults have difficulty in understanding him; but this is because of the imperfection of the child's means of communication, and not at all because his attitude is really foreign to, or unthinkable by, the adult mind. The processes of association, of psycho-physical correlation, of sensori-motor reaction, of instinct, of attention, of apperception, and of habit, are identical in principle, differing only as the immature differs from the mature, that is, in the firmness and breadth of the associative connexions, in the volume and range of ideas, and in the degree of power and precision in volitional action.

If the child and the man were different sorts of beings, then our psychology of the adult mind would throw no light on the nature of the child mind, and our child study would help us not a whit in the understandings of the adult consciousness; but I hardly think that any competent psychologist would subscribe to propositions of that kind. Everywhere, not only between the child and the adult, but between one child and another, between one adult and another, between men and women, between men of one race and men of another race, we find the most striking differences; differences so striking, indeed, that often one individual is forced to say of another, "His mental attitude is so foreign that I cannot comprehend it." This, however, does not make them beings of different kinds essentially. For great and important as the differences are, the likenesses are greater and more important still; for they are fundamental and essential, while the differences are incidental and accessory.

In sharp contrast, then, to the view sometimes expressed, that the various periods of life are so strikingly different from one another that there must be virtually a separate psychology for each, the position taken here is that there is only one psychology, because mind in its essential features is everywhere the same; that this one psychology has many chapters; and that it must be essentially developmental and dynamic in its spirit and method, never losing sight of the fact that it has to deal, not with things that can be described and inventoried once for all, but with living processes and forces that reveal new and striking features even while under the observer's attention.

Tracy, Frederick, *The Psychology of Adolescence* (New York, Macmillan, 1920), pp. 3-4.

338

Education Means Change

The arts and sciences serve human welfare by helping man himself, for the better. The word education refers especially to those elements of science and art which are concerned with changes in man himself. Wisdom and economy in improving man's wants and in making him better able to satisfy them depend upon knowledge—first, of what his nature is, apart from education, and second, of the laws which govern changes in it. It is the province of educational psychology to give such knowledge of the original nature of man and of the laws of modifiability or learning, in the case of intellect, character and skill.

Thorndike, Edward L., *Educational Psychology, Briefer Course* (New York, Teachers College, Columbia University, 1917), p. 1.

339

Forms of Learning and Mental Changes

In order to supervise the child's learning most effectively, it is necessary to know what mental changes take place in the different forms of learning which he undertakes. Merely to know the result which is aimed at is not sufficient—important as this is. But in the main the art of the teacher is one of following the changes which take place in the mind of the pupil, and of bringing to bear his influence upon them to produce the highest degree of improvement with the least expenditure of effort. In order to understand the process which is going on in the child's mind when he learns the various branches, it is necessary to have a conception of the typical learning processes which are involved in these branches.

Freeman, Frank N., *The Psychology of the Common Branches* (New York, Houghton Mifflin, 1916), p. 3.

340

Value of Experimental Observation

In the last quarter of a century the volume of experimental work has expanded to such an extent that it is becoming well-nigh hopeless to get a conspectus of the position. Much of this work has reference direct or indirect to educational matters, and it is hoped that the survey here attempted may help the student of education to find his bearings in this territory. Enthusiastic experimenters are apt to forget that wisdom did not delay its entrance into the world until the reign of experimental psychology and that the experience of practical teachers gives them an insight into the mentality of youth obtain-able in no other way. Nevertheless, the value of experimental observation cannot be gainsaid, and the science of education must take into account the evidence acquired by exact methods.

Fox, Charles, *Educational Psychology* (New York, Harcourt, 1925), p. vii.

341

Solving Problems of Human Behavior by the Objective Method

Many of the problems of human behavior may be solved by the objective method—activities observed either directly or by the aid of recording or measuring devices. We can observe movements of the limbs, of the eyes, of the facial muscles; we can hear and record vocal expressions; we can secure graphic records of respiration and pulse and chemical activities from glandular secretion. With one exception, every kind of human activity of which we now have a conception may be objectively studied. The one exception is consciousness, that is, one's subjective mental experiences, one's sensations, images, memories, feelings, emotions, and impulses, and the study of these activities lies rather exclusively within the province of psychology.

Gates, Arthur L., *Psychology for Students of Education* (New York, Macmillan, 1928), p. 16.

342

Need for Psychology

But in all the higher work of mental and moral training we must look to psychology. . . . Psychology is indeed needed as a handmaid to Ethics in rendering clear the idea of our goal. But it is needed still more in understanding our starting point, the child, on whose rudimentary impulses and aptitudes our educative work has to act. It is needed . . . for any clear thinking out of the processes of teaching. "While the pupil thinks the object under consideration, the teacher thinks the pupil's process of thinking the subject."

Sully, James, *The Teacher's Handbook of Psychology* (New York, Appleton, 1910), pp. 13-14.

343

The Theory of Identical Elements Loose and Ambiguous

When one studies the psychology of generalization he becomes aware of the uselessness of some of the formulas which have been proposed by those who hold that transfer of training takes place in cases where there are identical elements present. The identical element is usually contributed by the generalizing mind. On the other hand, there may be identical elements potentially present in various situations, but wholly unobserved by the untrained or lethargic mind. In fact, the discovery of the identical element in a situation is in some cases the whole problem of training. Take the famous illustration of Newton's discovery. He saw for the first time that the relation between the moon and the earth is identical in character with the relation between the earth and everything which falls toward the center. The discovery of this identity in the two situations was the great achievement of a scientific mind. The discovery of identical elements in all of the Indo-European languages was the achievement of the students of comparative philology who a generation ago established the broad principles of the scientific study of grammar and word structure. The discovery of identical elements in two situations was in both cases an achievement of trained minds applying themselves to situations which heretofore had defied analysis. Or we might borrow our illustrations from the world of mechanics. The discovery of a common mechanical principle in all of the situations which involve the use of the wedge and the inclined plane is an achievement of mature physical science. Primitive man did not recognize in these different situations a common principle, nor was he able to carry over from one practical device to other practical situations the experiences that he had accumulated in the accidental use of one tool after another. We may express this limitation of primitive intelligence by saying that although common modes of procedure were possible in these different cases, they were not discovered.

JUDD, CHARLES H., *Psychology of High-School Subjects* (Boston, Ginn, 1915), pp. 414-415.

344

Transfer Depends on the Power of Generalization

The first and most striking fact which is to be drawn from school experience is that one and the same subject matter may be employed with one and the same student with wholly different effects, according to the mode of presentation. If the lesson is presented in one fashion it will produce a very large transfer; whereas if it is presented in an entirely different fashion it will be utterly barren of results for other phases of mental life. It is quite possible to take one of the objects of nature study, for example, and to teach it in such a way that it becomes an isolated and utterly formal possession of the student. This has been illustrated time and time again by the instruction which has been given in birds and plants. A teacher can teach birds and plants in such a way as to arouse a minimum of ideas in the student's mind. The training may be as formal in these content subjects as it ever was in language instruction. On the other hand, the same subject matter may be taken by a different teacher, and under other methods can be made vital for the student's whole thinking. Thus the teacher who is dealing with birds as a subject of nature study and secures an interest on the part of his students for the world in which these birds live, through an examination of the structures and habits of the birds, will have in this subject matter one of the most broadly interesting topics that can be taught. In exactly the same way a teacher who knows how to make use of the materials given in a Latin course may render this subject very broadly productive, as contrasted with the teacher who merely gives the formal aspects of the subject.

Formalism and lack of transfer turn out to be not characteristics of subjects of instruction, but rather products of the mode of instruction in these subjects.

JUDD, CHARLES H., *Psychology of High-School Subjects* (Boston, Ginn, 1915), pp. 412-413.

345

Claim of Behaviorism

Behaviorism claims to render a more complete and a more scientific account of the totality of human achievement *without* the conception of consciousness, than traditional psychology is able to render *with* it. The factors which traditional psychology vaguely classifies as conscious or mental elements merely vanish without a remainder into the biological and social components of the behavioristic analysis.

WEISS, ALBERT PAUL, *Theoretical Basis of Human Behavior* (Columbus, Adams, 1929), p. vii.

346

A Psychological Experiment and Conclusion

The animals (rats) were divided into four groups: a twenty-five day old group, which is the age at which they become independent of the mother; a sixty-five day old group, or the age of sexual maturity; a two hundred day old group, which might represent the middle of adult life; and a three hundred day old group, to represent the beginning of old age. The twenty-five day old rats and the sixty-five day old rats, which represent our most youthful groups, learned the maze in approximately thirty trials; whereas the two hundred and three hundred day old animals required nearly a third more trials—about forty-two. The young animals required about six seconds for their finally perfected runs; the old groups required about ten seconds. These experiments show clearly two things: first, that, as everyone has hitherto suspected, the young animals do learn faster than the old ones; but in the second place, that the old animals can learn very fast indeed, all things considered. We have continued these experiments with a few very old animals and we find that animals even five and six hundred days old still have the ability to learn this complicated maze. . . . I think these experiments should give those of us who have passed the first bloom of youth a good deal of hope. Many of us in that too often unfortunate condition say that we do not know how to dance, to skate, and to play games because we did not learn such things when we were young; but this excuse is no longer valid. We now have experimental evidence to show that the contention of William James concerning the non-plasticity that is supposed to go with old age, which has been so universally accepted, is completely unfounded. Any one of us who cares to put on the highly skillful acts needed in either work or play can do so provided he is willing to spend approximately a third more time than a youth would have to spend in acquiring the same acts. . . . There is hardly any line of activity which will not yield to "middle-aged" effort.

WATSON, JOHN B., in *Suggestions of Modern Science Concerning Education* (New York, Macmillan, 1917), p. 91 ff.

347

Summary of a Behaviorist's Conception of Thinking

Thinking is largely a verbal process; occasionally expressive movements substitutable for word movements (gestures, attitudes, etc.) enter in as a part of the general stream of implicit activity. Thinking in the narrow sense, where learning is involved, is a trial-and-error process wholly similar to manual trial and error. Verbal manipulation along one line is checked and stopped and a new line is begun for exactly the same reasons that such processes are checked and begun in manual learning. The thinking adjustment is achieved when the final word-grouping (sentence or judgment) or overt bodily reaction which comes as the end result of the process of thinking makes the initial stimulus to thinking inoperative or inert; that is, the final reaction, verbal or other, so changes the general state of the organism as a whole that the original stimulating factor can no longer act upon the subject. A crude illustration which can properly be carried over to thought is to be found in the hungry hunter's eager search for game. He finds it, captures it, prepares and eats it, lights his pipe and lies down. The hares and quail may peek at him from every corner of the brush, but their driving power for the time is gone.

Watson, John B., *Psychology from the Standpoint of a Behaviorist* (Philadelphia, Lippincott, 1924), pp. 355-356.

348

Behaviorism as Methodology, Not as Philosophy

The point cannot be overstressed that human purposes and values, and even attitudes and appreciations—the central concern of education—cannot be described in mechanistic terms without losing their meaning and significance. Behaviorism as a methodology for the scientific investigation of the habit processes in education is invaluable, and as a methodology we embrace it willingly. But, as a theory covering all aspects of human experience, especially the more intimate facts of consciousness, it must be vigorously rejected. Unless it is made to play the subsidiary role of an instrumentality for the achievement of educational purposes its influence on educational thinking will be pernicious. A philosophy of education must not be held in bondage by its servant, behaviorism.

Chapman, James C., and Counts, George S., *Principles of Education* (Boston, Houghton Mifflin, 1924), pp. 97-98.

349

Physiological Psychology

"Physiological psychology," as it chooses to call itself, has a great field for investigation. But even if the soul is only a bodily function, it is certain that physiology can not make any progress without borrowing at every step the data derived from psychology by introspection. For feeling, knowing, and volition are, as already pointed out, not matters of external observation, but only of internal observation or introspection. Physiology, like other natural sciences, conducts its investigations by the aid of external observation, mapping out provinces in the world, inventorying their contents, and finally classifying and systematizing facts by relating them to principles. By principles I mean energies acting according to laws: a cause that explains a phenomenon is a principle. But to external observation there is no psychical fact visible. We can behold things occupying space, and events or actions filling time, but we can not see a feeling with the eye nor hear it with the ear; nor can we taste it, or smell it, or touch it. A feeling can be perceived only by consciousness. So, too, the processes of knowing and willing can not be perceived except by consciousness. The most that physiological psychology can do is to investigate the relations of two orders of observation. It must compare the facts of physiology, the changes of the body, with the facts of mental action in the form of feeling, thought, and volitions. Introspection is therefore utterly indispensable to physiological psychology.

Harris, William T., *Psychologic Foundations of Education* (New York, Appleton, 1898), p. 16.

350

Psychology an Independent Science

The view to which this course of lectures has so far led is that the knowledge represented in the psychological or humanistic group of sciences is not only differentiated clearly from other kinds of scientific knowledge, but is the most fundamental variety of scientific knowledge. To very many persons of the present generation the most fundamental variety of knowledge seems to be that represented in traditional physical science. The reason why I cannot accept this view is that, however useful such knowledge may be, it is based on abstractions which are not consistent with either biological or psychological phenomena; whereas there is not necessarily any similar inconsistency about psychological knowledge, however imperfect such knowledge may be.

I am well aware that at the present time this is neither a usual nor a popular point of view. It is contrary to what takes itself to be common sense to throw doubts on the nature of what is known as physical reality. Moreover, in placing psychological interpretation above physical interpretation are we not making Man the measure of the Universe—Man, a tiny inhabitant of an insignificant planet which would never be missed from the Universe if it disappeared!

Such arguments tacitly take for granted the Newtonian conception of the visible Universe; they belong to the time before Hume and Kant: the time when a soul appeared to be a thing confined within a brain existing in a Newtonian world, or else to be nothing but a succession of flashes of consciousness in such a brain. We cannot go back to these old conceptions. As Kant showed, the whole universe of our experience is the domain of psychological activity, so that it is impossible to localize psychological activity either in space or in time: It pervades them, and if this were not so they would be nothing to us. Our conscious existence is no mere existence here and now. The sooner we cease to be dazzled and confused over psychological questions by the Newtonian philosophy, the better will it be for all of us.

When we realize what is implied in the fact that our universe is a perceived universe it becomes evident that what may be called General Psychology is a very wide-reaching subject, affecting directly or indirectly our conceptions of all the sciences. For this reason it, along with Logic, which deals generally with the forms assumed by knowledge in the various sciences, is commonly taught and studied as a part of Philosophy. If we could separate the influence of a body from that of a soul, or if we could treat the phenomena of conscious behaviour as dependent on physiological processes in the brain, psychology would become a much more limited subject; but, as I have maintained in the previous lectures, such treatment of conscious behaviour is not possible unless we abstract from, or leave out of account, what is specifically characteristic of conscious behaviour.

If there were such a thing as perfect knowledge, there would be no need for the imperfect knowledge which is based on abstractions; but in dealing with human behaviour, as with other phenomena, we must often be content with imperfect or abstract knowledge. Hence we can usefully treat human behaviour from a physiological or even physical standpoint. This treatment is that of "physiological psychology." As a physiologist I am perhaps naturally inclined to claim it as a part, and a very important and interesting part, of physiology. In any case it seems to me to be something different from psychology in the proper sense. This deals generally with the characteristic features of perception and conscious behaviour of every kind, and these features cannot be described in terms of physiological conceptions.

No one can have a firmer belief than I have in the usefulness and indeed indispensability of physiology; but at the same time I am thoroughly convinced of the limitations attached to physiological interpretation of human behaviour. At present there is what seems to me an exaggerated idea among the general public, not of the importance of psychological knowledge, for its importance can hardly be overestimated, but of the importance of mere physiological or even physical treatment of human behaviour. The scientific knowledge which deals with experience from the psychological standpoint seems to be the most fundamental variety of scientific knowledge; but this knowledge ceases to have the same fundamental character when it is only treated from a physiological or physical standpoint, or from an animistic standpoint.

At the end of this lecture I should like to emphasize the conclusion that psychological knowledge is not only different in kind from other sorts of scientific knowledge, but has an appeal no whit less cogent, and is at the same time more general in its interpretation of our experience.

Haldane, J. S., *The Sciences and Philosophy* (New York, Doubleday, 1930), pp. 146-149.

351

Scientific Psychology

The process of obtaining quantitative data about the functioning of the various senses, the brain, and the nervous system as a whole, has been so successful that many psychologists have been led to assume that all mental processes can be explained in chemical-physical and physiological terms. But the recognition of these limits has been taken up by other psychologists who have emphasized the impossibility of physiological explanations for such facts as pure memory in contrast to rote memory, the unconscious, purposive striving, and consciousness. These very contrasted differences of opinion have given rise to many controversies, especially over the old problem of mechanism vs. purpose, or whether the human organism is simply a machine. The presentation of the views of the different schools of controversy in psychology is instructive and interesting in this regard.

The first systematic attempt to explain the phenomena of mental life was made by the British school of Associationism. This school of psychology contended that ideas are independent revivable units with permanent power of association, and when one idea is revived others are revived also, according to the laws of similarity, contrast, and contiguity. This conception of mental life was atomistic, implying that ideas are mechanical units governed by the power of these laws of association. The objection to this way of looking at mental life is that the term "power" is metaphysical, and that ideas are not permanent but passing phases of mental life, with an organic rather than a mechanical relationship, the unit being the "stream of consciousness" and not the single idea.

The structural or sensational school was the first attempt to make psychology experimental. Its method is to take some momentary psychosis or state of consciousness and analyze it into elementary contents, and then show how these elements combine. Mind is thus viewed as a mental structure which can be split up and analyzed. The members of this school realize that such a concept is an abstraction since mental contents are not unchanging objects but are rather constantly in the process of changing. They contend, however, that such an abstraction is necessary if mental life is to be treated scientifically at all. Introspection is the method by which they would analyze and dissect sensation into its attributes and the other phases of mental life. In recent times there has been a violent reaction against introspectionism, the allegation being that it is a purely subjective method, unreliable and unverifiable, and generally sterile of scientific results.

The act school, originated by Brentano, was a reaction against the structural psychology, and stressed the fact that mind is active and must be considered in terms of both act and content, the former being psychical and the latter physical. For example, in the perception of a square, the squareness of the four lines is the act or psychological part of the perception and the four lines themselves are the physiological part. The mind, therefore, consists of acts in itself, and these acts should be the basis of physiological investigation. The more recent school of Gestalt Psychology has also reacted against the structural school, insisting that the mind functions as a totality and cannot be split up and analyzed. Koehler and Koffka, the chief exponents of this school, contend that mind is more than a mere bundle of sensations or an additive affair, that it has characteristics in its own right as a result of its total structure or *gestalt*. They have shown that there are aspects of thought even on the animal level which cannot be explained in terms of neural reflexes. The anthropoid apes, for example, are able to gain "insight" into the solution of a simple problem, carrying out the movements to the final goal in immediate succession. They also insist that learning does not take place in terms of trial and error alone or in the building up of reflexes in an additive fashion, but that the total pattern or *gestalt* forms an essential aspect of the process.

The functional psychology grew out of the biological idea of the organism functioning as a unit or totality in response to its environment. Consciousness or mind enters as an adaptive operator in the solving of conflicts in the environment when habit finds itself in an insoluble difficulty. Outside of the solving of conflicts the law of habit operates exclusively.

They insist that consciousness cannot be defined further than that it is simply present in its forms such as sensations, feelings, and thoughts, and that apart from these we have no expression of it.

The behaviorists have pushed the interpretation to an extreme conclusion. They deal with the total response of the organism functioning as a unit and rule out of psychology such concepts as imagery, consciousness, thinking, and instincts, which cannot be explained physiologically. Insisting that all subjective processes reported by means of introspection have prevented scientific progress, they treat human and animal conduct entirely in terms of implicit and explicit behavior. Feeling and emotion is explained by glandular secretions, and thinking is accounted for in terms of implicit speech mechanism set up in the tongue and larynx.

This view regards the human organism as a machine, explicable in terms of physics and chemistry on the lower levels of cellular life, in terms of physiology in regard to particular organs, and in terms of psychology on the level dealing with the total organism functioning as a unit. The behavioristic approach has been fruitful in investigating the physiological processes by entirely ignoring psychical processes, and indeed it has made speculative psychologists take stock of matters. As a methodology, therefore, it has been of service, but it has been widely condemned of late for evading some of the most difficult problems of psychology simply by denying their existence.

Many psychologists have violently protested against the mechanistic approach, on the grounds that the nature of mind is such as to make it inexplicable unless it can be conceived as reaching out for or striving after an end. Wm. McDougall, for instance, insists that this purposive striving is the very basis of a psychological system since it is found in all forms of life from the amoeba up to man. He objects to the reflex action concept in explaining animal and human behavior, because reflexes lack spontaneity and persistency which purposive action displays. Furthermore, reflexes are dependent upon the stimulus and do not apparently exhibit the phenomenon of seeking a goal or anticipating a coming situation, which is the very essence of purposive action. In regard to the higher mental processes, McDougall recognizes the physiological aspects of rote memory, but insists that pure memory or the reflection upon past and future events is unintelligible in terms of reflex arcs.

From this fragmentary account, it appears that psychology, the youngest of the sciences, seems to be in perhaps the most controversial condition of them all concerning mechanism and purpose.

As far as a scientific philosophy of life is concerned, the investigation of psychology has made a contribution as to the value of the scientific method, but it has not revealed any basis for assuming that mind or behavior is adequately explicable in terms of mechanism.

McFarland, Ross A., "Is There a Scientific Philosophy of Life?" in *Religious Education* (Volume XXIII, February 1928), pp. 113-115.

352

Significance of the Idea of the Self

The significance of the idea of the self, in common life, in psychology, in ethics, in religion, and in education, is so well recognized as scarcely to call for special mention here. Psychology may very well and very justly pride itself on getting along "without a soul," in the older sense of that much-abused term, but it cannot ignore that clustering of mental states and processes, that unification of ideas, that sharp separation between the groups and clusters that I call "mine" and the groups and clusters that I call "yours," which everywhere mark the mental history of men; nor that assurance of the identity and permanence of the individual subject throughout the diversity and the ceaseless mutations of the contents of his experience, which, in all cases not flagrantly pathological, constitute the most persistent and ineradicable of our convictions.

In the moral life of men, and in ethical philosophy, which is the attempt to give a rational account of that moral life, personal identity is at the same time the starting point and the goal, the foundation and the copestone. Without it there could be no explanation of moral obligation; for "duty" is a word without a meaning unless there be some one who can say, "This is *my* duty." Apart from the conception of personality there could be no imaginable *summum bonum* to constitute the final goal of all moral effort and the final definition of the meaning of life.

TRACY, FREDERICK, *The Psychology of Adolescence* (New York, Macmillan, 1920), pp. 119-120.

353

Mechanistic Interpretation of Conscious Behaviour Totally Unsatisfactory

If animism is the counterpart to the Newtonian conception of visible and tangible reality, it is equally true that a mechanistic conception of conscious behaviour is a natural revolt from animism. The mechanistic interpretation of conscious behaviour appears at its strongest and best when it is pitted against animism, just as the mechanistic interpretation of life appears at its best when it is pitted against vitalism.

Let us try to see what the mechanistic interpretation, as commonly applied, amounts to. In the first place, it makes no attempt to give any physico-chemical explanation of the fact of consciousness. It simply treats consciousness as a completely mysterious accompaniment of physiological phenomena which occur in the central nervous systems of higher animals. Any physico-chemical explanation of this accompaniment is expressly disclaimed. It is true that one enthusiastic mechanist affirmed, early last century, that the brain secretes consciousness, just as the liver secretes bile. Bile is, however, something visible and tangible, while mere consciousness (treated as an accompaniment of material activity) is not. Hence there is not, so far as we know, any meaning in saying that the brain secretes consciousness, nor is any such assertion needed for the mechanistic interpretation of conscious behaviour.

This point being made clear, it is easy to understand the basis of the mechanistic interpretation. That basis is the now easily demonstrable fact that every element which we can distinguish in conscious behaviour is dependent on what are ordinarily regarded as physiological or physical conditions. In the previous lecture I have already referred to this fact; but perhaps some expansion of the evidence for it may be added at this point. Let us first consider some of the conditions on which consciousness and rational behaviour depend.

Consciousness and the power of voluntary movement are immediately lost in man if the supply of arterial blood to the brain is cut off, as when the heart ceases to beat or a serious wound in the neck or chest allows the arterial blood to escape. Immediate fainting is rapidly followed by death if the blood supply is not restored. An exactly similar result follows if the blood supplied by the heart to the brain is not oxygenated. We have only to take three or four deep breaths of pure nitrogen or hydrogen (so as to wash out nearly all the oxygen in the lungs and in the venous blood normally returning to them) in order to produce complete loss of consciousness and paralysis of voluntary movement. If the oxygen supply to the lungs is now restored again immediately, consciousness and power of voluntary movement are again restored as rapidly as they were lost. The disappearance and reappearance of consciousness are just like the extinction of a piece of flaming and glowing coal when it is placed in pure nitrogen, and its relighting when it is restored to air before it has lost too much of its heat.

If now, instead of completely cutting off the supply of oxygen to the lungs, we gradually reduce the proportion of oxygen in the air breathed to a little less than half, we produce a marked deterioration in mental powers. The senses become dimmed, and what are ordinarily painful stimuli, such as those produced by a burn, may not be noticed at all. Power of memory of anything happening at the time is greatly impaired; behaviour becomes incoherent and irresponsible; and power of co-ordinated muscular movement is markedly diminished. It is thus quite evident that conscious behaviour of a normal kind depends very directly and immediately on a normal supply of oxygen to the brain.

But this is only one of a host of conditions which are now known to determine conscious behaviour. The oxygen supply to the brain is particularly open to exact investigation, thanks largely to the facts that it can so easily be interfered with, and that impairment in the normal saturation of the arterial blood with oxygen is accompanied by a striking change in its colour; but the regulated supply of other components of the blood, and so far as we know of every normal component except gaseous nitrogen, is, in the long run, equally important, directly or indirectly, in the maintenance of conscious behaviour. Some of these components are present only in excessively minute proportions, and yet this minute proportion must be maintained. For instance, an increase of about 1 in 20,000 million parts in the proportion by weight of ionized hydrogen present in the brain appears to be sufficient to produce loss of consciousness.

Minute proportions of specific substances produced in other organs than the brain are now known to play an essential part in determining normal behaviour. Perhaps the classical instance of this is the specific iodine-containing substance formed in the thyroid gland and quite recently synthesized artificially outside the body. The absence or insufficient supply of this substance leads to a well-known form of idiocy. We can on general grounds be quite certain that the maintenance of normal cerebral structure and normal conscious behaviour depends on a supply of all sorts of substances brought by the blood to the brain from all other organs of the body, as well as from the external environment.

Equally important for conscious behaviour is the proper maintenance of the energy, potential or kinetic, reaching the brain. Heat is one form of kinetic energy; and if the temperature of the brain becomes too low or too high, conscious behaviour is impaired or annulled: nor can it be maintained without a proper supply of the potential energy contained in the food material and oxygen reaching it. If, moreover, the energy reaching it in the form of afferent stimuli from all parts of the body is not properly regulated, conscious behaviour becomes impaired. Every voluntary movement is guided to a greater or less extent by afferent stimuli from all parts of the body, including organs of the special senses and the semicircular canals.

If now we consider the origin of the brain itself and of its characteristic behaviour in conscious experience, we find that both structure and behaviour are inherited from previous generations through germinal elements which exhibit no sign of consciousness. We can trace this inheritance backwards towards lower forms of life, and by inference to what we call inorganic material. Thus in every direction there is, it may be argued, the clearest evidences in favour of a physico-chemical determination, and consequent mechanistic interpretation, of conscious behaviour.

In previous lectures I have already, to some extent, discussed and rejected the mechanistic conclusions. The evidence only seems convincing if we make the initial assumption that the Newtonian interpretation of visible and tangible reality represents that reality satisfactorily, so that when, for instance, we speak in the Newtonian sense of matter and energy, time and space, our concepts of them correspond with reality. This correspondence was, we found, assumed by both mechanists and vitalists in the interpretation of mere life, and is assumed by both mechanists and animists in the case of conscious activity. The difficulties into which the assumption leads have already been discussed in the case of life. Let us now consider the difficulties into which the assumption leads in the case of conscious behaviour.

The conception of the soul is a conception, as we have seen, devised to account for the outstanding fact that each element in conscious behaviour expresses itself as belonging to a whole. As has also been pointed out in Lecture VI, the wholeness of conscious behaviour is limited neither in space nor in time. If, in all innocence, we treat its elements as existing separately from one another without a "meaning" which binds them together, we have simply ignored what is characteristic of them. What we interpret as the action of molecules of oxygen on the brain substance is a separate event in space and time, as is the response of what we interpret as the brain substance. No process of addition of such separate events will ever afford us the remotest conception of what we see and experience when we see and experience conscious behaviour. We certainly see something when we see a living body with all the signs of conscious behaviour absent in a person who breathes pure nitrogen for a short time, or when we see a dead body; and we can interpret the perception of the dead body fairly satisfactorily by means of mechanistic conceptions corresponding to the Newtonian "philosophy." But we cannot connect the something which we seem to see with what we seemed to see in the conscious behaviour of the person. We are tempted to join up our broken experience by saying either that there is a soul that has left the body temporarily or permanently or has become paralyzed in some way, or else that there is really no such thing as a soul, but only a brain of which the normal activity is accompanied by an impalpable something called consciousness.

It is the latter alternative which I am considering in the present lecture, after rejecting the first alternative in the previous lecture. The second alternative is in every way as unsatisfactory as the first. Let there be no mistake. The difficulty does not concern an invisible and impalpable something called consciousness. If this were all the source of difficulty we could regard consciousness as an imponderable secretion, or as an impalpable accompaniment of all physical action. The difficulty concerns visible and palpable conscious *behaviour*. This behaviour is utterly different in kind from what we interpret as the behaviour of oxygen molecules and brain substance. The molecules, as we interpret their behaviour, do not act as part of a whole which extends over its spatial relations; nor do their actions represent a whole which expresses progressive continuity in its time-relations. Their behaviour as actually interpreted in accordance with physical principles thus throws no light at all on conscious behaviour. To suppose that it does is simply to ignore the character of the phenomena under discussion, and is thus very bad science.

We are, therefore, if we insist in adhering to the Newtonian conception of visible and tangible reality, buffeted backwards and forwards between animism and a mechanistic interpretation. Neither interpretation corresponds with our experience nor is in any way satisfactory as a scientific working hypothesis in the interpretation of conscious behaviour, though either hypothesis may be used so long as we do not attempt to come to close quarters with what we are observing. If, however, we adopt the animistic hypothesis, we seem to leave the field clear for the application of the Newtonian conception to all that is outside the immediate influence of the soul or the vital principle, and to have comfortably shelved the difficulties which arise over mechanistic interpretations of conscious behaviour and life. It was thus very natural for Newton himself, as it has been for most physicists and chemists, to accept animism. At the present time, owing to the completely mistaken impressions which are prevalent as to the practical success of mechanistic interpretations of mere life, the tendency is rather to accept the mechanistic interpretation of conscious behaviour, or at least to suspect that it is probably correct. When, however, we come to close quarters with the mechanistic interpretation, it turns out to be totally unsatisfactory, since it simply ignores the character of what has to be interpreted.

HALDANE, J. S., *The Sciences and Philosophy* (New York, Doubleday, 1930), pp. 122-128.

CHAPTER XV

The Function of the Curriculum

THE material in this chapter deals with a constant educational problem. The curriculum question can never be finally solved, for as society progresses, the concept of values, and hence of aims, changes and the curriculum must be reconstructed to meet these changes.

Bode is no doubt right in insisting that the question of the curriculum is primarily a question of philosophy (357). Amid all that is now being said and done with reference to the curriculum, it seems worth while to remind ourselves of what Perry says about theory and belief in relation to social life (354). It is also worth while to remember with Betts that there are certain permanent personal and social values which we must not overlook in our desire to be practical (360). As Briggs says (363), the fundamental problem in education is the curriculum. Because the problem is fundamental it is to be hoped that students in the philosophy of education will learn to adopt a critical attitude in their evaluation of theory and practice in this field.

354

Theory and Belief in Relation to Social Life

No theorist is under obligation immediately to give society the benefit of his theorizing. It was said of Samuel Clarke, who sought to overthrow atheism by scientific argument, that no one had really doubted the existence of God until he undertook to prove it. There will always be an absolute difference between rational assent on theoretical grounds, and implicit belief. The theoretical mood, even when a conclusion is reached, is a state of practical doubt. When the transition is made from believing to theorizing, the loss is certain; and he who lightly encourages such a transition is guilty of recklessness and irresponsibility. It is a grave matter to substitute one's own theory, however well-reasoned, for another man's belief. For the belief is a part of the believer's life, a condition of the confidence and hopefulness of his action. It is a mistaken idea that honesty compels every theorist to be a propagandist; it is true, rather, that in the great majority of instances, the sentiment of humanity, and a serious regard for the well-being of society, require that he shall not.

The task of mediating between theory and life is perhaps the most delicate and responsible task which it falls to the lot of any man to perform. And it cannot be denied that the theoretical habit of mind tends to disqualify one for undertaking it. For the investigator is trained to neglect every consideration but such present evidence as he can obtain. The human probability that his conclusions will some day, perhaps tomorrow, be over-ruled by new evidence, he properly excludes from his consideration. It is not relevant to his problem. But while theories may be changed with little cost and with certain gain, this is not true of beliefs. Here the cost is more certain than the gain. And the very consideration which the theorist is trained to neglect, and must neglect if his mind is to be free, is here of paramount importance. He who is to advise men must be the friend of men. He must understand their hopes and share their responsibilities. Hence he must regard every idea with reference to its effect on that present, concrete, human state of mind, from which all social action must proceed. No one has proclaimed more eloquently than Francis Bacon that it is to knowledge that man owes his triumph over nature and his advancement in all noble arts. But he would willingly, I think, have said of established belief, what he said of antiquity, that it "deserveth that reverence, that men should make a stand thereupon and discover what is the best way; but when the discovery is well taken, then to make progression."

Perry, Ralph Barton, *Present Philosophical Tendencies* (New York, Longmans, 1929), pp. 22-23.

355

The Curriculum a Set of Experiences

The new view is that the curriculum is a set of experiences, or the activities in which one engages, or a series of life-situations one faces. This is a good emphasis, especially for the mature type of pupil. It does not so well fit the sensory, reading, thoughtful, introverted type of pupil. But the thing that is most requisite and most lacking in the practice of the curriculum as experience is a standard of what is worth while. The fact of interest in an activity is not an adequate standard, for the reason that interest may be factitious, its semblance may be borrowed, and many worthless things may be interesting. The endeavor to make the present activities and needs of society the standard is somewhat fatuous, because our society is rapidly changing, and, even if it were not, what exists is not the standard for what ought to exist. The only way out is to conceive clearly the ideal character of man and the characteristics of an ideal society, as guaranteed by one's philosophy of life, and then select those experiences, activities, life-situations, and studies that, according to one's best judgment, best contribute to those ideal ends. Naturally, there will be conflicting views, but their consideration is one thing philosophy is for.

Horne, Herman Harrell, *This New Education* (New York, Abingdon, 1931), p. 90.

356

Basic Facts of an Acceptable Program of Education

An acceptable program of education for the nation's youth may be founded on these facts. First, that during the period of adolescence our primary concern should be the provision of educational guidance of a character which promises youths of every condition maximum growth physically, mentally, and morally. In so far as participation in industry for profit interferes with the realization of this ideal, it should be eliminated from the life of the nation's children, particularly for those aged fourteen and fifteen.

Second, that our best organized school systems offer already facilities which promise greater dividends to the youth of the land in physical, intellectual, and moral growth that can reasonably be expected as a by-product of participation in industrial life where profit must of necessity be the first consideration. This is true for all adolescents, but has particular force for those under sixteen.

Third, that in continued critical analysis and study of the needs of youths of all types, and in careful experimentation in developing the educational and guidance facilities best suited to answer these needs, will be found the solution of the problem of providing the wisest education for the nation's adolescents.

Fourth, that those communities will profit most, both spiritually and industrially, which constantly strive to develop and to keep abreast of the best practice, their facilities for the guidance of youth. Just what these facilities will need to be, cannot be answered with finality, but greater progress toward a realization of the ideal is promised through agencies whose primary purpose is education rather than private profit.

The general objectives of all education may be stated as follows:

1. To promote the development of an understanding and an adequate evaluation of the self.
2. To promote the development of an understanding and an appreciation of the world of nature.
3. To promote the development of an understanding and an appreciation of organized society.
4. To promote the development of an appreciation of the forces of law and of love that is operating universally.

The individual self, nature, society, and God—these four, and in particular the adjustments which the individual self must make—constitute the objectives of education.

One fundamental principle needs to be emphasized. The activities of pupils constitute their curriculum. The total activity of the pupil is comprehended within the meaning of this definition. So far as the secondary school is concerned, the purpose would be to secure balance and proportion among the many types of activity appropriate to adolescent youth. Of these types, the academic as represented by the time-tried subject-matter courses has claimed the major attention and doubtless will long continue to do so. If activity in the academic subjects can be directed to proper ends without displacing other kinds of activities which are useful and necessary for complete living, the old subject-matter courses will render an even larger measure of service than they previously have rendered. The scholar who is said to love learning for its own sake is not necessarily the finest type of educated man. Pure scholarship unaccompanied by worthy attainments in other phases of life is not a desirable outcome of secondary education.

National Education Association (Department of Superintendence), *Sixth Yearbook* (1928), pp. 14-15.

357

Curriculum Construction a Matter of Philosophy

My purpose in the foregoing discussion is to make clear that curriculum construction involves a large question of direction or purpose, which our zeal for activity analysis is disposed to overlook. It is a question, if you like, of educational statesmanship. The nature of that question is indicated in the pamphlet by Dewey to which reference was made in the preceding chapter. According to Dewey, if I interpret him correctly, the struggle over the curriculum represents an attempt by democracy to think clearly about its own meaning and purpose. It wants a larger measure of opportunity for the individual. But it does not understand clearly what this means or how it is to be attained. From the standpoint of a democratic program this is our outstanding problem. It is only too easy to train a youngster so as to make him just a cog in a machine, to make the ideas, the beliefs, the attitudes which he acquires a limitation upon his development instead of a means for future growth. If our chief concern is to make provision for flexibility, both in the individual and in the social organization, then, as I tried to indicate previously, we are confronted with such problems as individual differences, the context to be provided for the material that we attempt to teach, the place of logical organization, and a host of others—all of them growing out of the attempt to take account of individual capacities and tendencies on the one hand and the conception of a democratic social order on the other. There is no prospect of getting anywhere with this as long as we cling everlastingly to activity analysis "like a sick kitten to a hot brick." The problem calls for historical perspective, for theory of mind, for insight into the educational significance of social institutions. People have written about the social significance of education since the time of Plato, but the subject has never, so far as I am aware, developed a special technique, such as we usually associate with the name of science. The problem reaches out into too many directions, it involves too much heterogeneity of material, it is too intimately bound up with our whole conception of life. It is the sort of thing which in the past we have commonly called philosophy.

No reasonably well-informed person can have the slightest desire to minimize the services of science. There are all sorts of problems in connection with curriculum construction for which activity analysis is indispensable. We all know what science has done for the progress of mankind. It is a curious irony that obstructions to further progress should now be raised in the name of science. Perhaps this uncritical enthusiasm for science will soon pass away. If not, we may yet have occasion to pray to be delivered from this obsession by the idea of scientific method.

Bode, Boyd H., *Modern Educational Theories* (New York, Macmillan, 1927), pp. 118-120.

358

The Curriculum and Educational Reorganization

It will be realized that the number of hours per day that pupils spend in school is no greater now than it was a hundred and fifty years ago, though the term has of course been materially lengthened. This being the case, it will be seen that the addition of all the new subjects for study ultimately necessitated the cutting-down of the time devoted to the older subjects. This was quite possible at first, as there was much waste in the instruction of the old-time school. By securing a better-educated teacher, by giving that teacher some training in school and class-room management and the art of teaching, by class grouping instead of the wasteful individual reciting, and by improving discipline through better teaching, very material economies were made and time for the new subjects was found about as they were added.

There came a time, however, after about 1890, when the limits of this process had been reached. The problem then became one of finding something to cut out if anything more was to be added, and after about 1900, with the introduction of new expression subjects and the marked shift in emphasis from the knowledge conception of education to the life-preparation conception, the problem of course-of-study elimination became quite acute. By the time another decade had passed, not only was the problem one of elimination but of the complete reorganization of the work of our schools as well. The development of intelligence testing and educational measurements, with the light these throw on the individual differences existing among school children, gave further impetus to the movement for course-of-study eliminations and educational reorganization. Since the close of the World War more attention has been given to curriculum and school reorganization than to all other phases of the educational problem combined. Taken together, these two might be said to be the great problems in education for at least the decade that lies ahead.

It is not improbable that a century from now the World War will be looked upon as the closing of one era and the beginning of another in world history, much as the Protestant Revolts of the sixteenth century and the French Revolution of the late eighteenth century have come to be regarded. The World War set in rapid motion forces that had long been under way, and the changes in living that are following it are certain to be far more swift than would have been the case had the War not been brought about. In consequence, since education aims to prepare youth for effective living in modern conditions, we need to predict as well as we can what changes will ensue, and then try to shape our school work accordingly.

Of some of the changes we seem reasonably certain. Many of the old forms of knowledge are likely to be much less useful as preparation for the modern world than they have seemed to be in the past, and our school training must emphasize more what the world of the future will call for, both in knowledge and training. Just what this is we do not quite know, but thousands of people are at work today trying to find out. We do know, however, that this world of the future will be a world of science, and industry, and commerce, and inter-communication; that the relations between peoples will be closer than before, and that in consequence we must learn better how to live in peace with one another; that the competition will be keener; that living will be more complex and more difficult; that complicated problems in politics and economics and international relations will have to be met and solved; and that the uneducated man and the untrained worker will have but little chance for success. Machinery will continue to displace the untrained worker; comforts and conveniences will be multiplied; children will need to work less and less; and the life of all will be made easier, but for children more dangerous.

The future, too, almost surely will call for a very practical type of knowledge. Young people will need to know how to do many things, and they will need to know how to care for and protect themselves under complicated and difficult conditions. This calls for good school training in learning by doing and in problem-solving. Young people of the future, too, will need to be well trained in certain important skills and habits; to be thoroughly grounded in proper attitudes toward life's problems; and to be actuated by well-thought-out ideas, ideals, and ambitions. This calls for definite attention to the "outcomes" of all instruction on the part of teachers. An education, then, that answered fairly well for a more simple and a less competitive kind of national life, will not suffice to meet the needs of the life that lies ahead of our young people of today.

Cubberley, Ellwood Patterson, *An Introduction to the Study of Education and to Teaching* (Boston, Houghton Mifflin, 1925), pp. 275-277.

359

Education Should Prepare for Complete Living

How to live?—that is the essential question for us. Not how to live in the mere material sense only, but in the widest sense. The general problem which comprehends every special problem is the right ruling of conduct in all directions under all circumstances. In what way to treat the body; in what way to treat the mind; in what way to manage our affairs; in what way to bring up a family; in what way to behave as a citizen; in what way to utilize all those sources of happiness which nature supplies—how to use all our faculties to the greatest advantage of ourselves and others, how to live completely? And this being the great thing needful for us to learn, is by consequence, the great thing which education has to teach. To prepare us for complete living is the function which education has to discharge; and the only rational mode of judging of any educational course is, to judge in what degree it discharges such function.

Our first step must obviously be to classify, in the order of their importance, the leading kinds of activity which constitute human life. They may be naturally arranged into: 1. Those activities which directly minister to self-preservation; 2. Those activities which, by securing the necessaries of life, indirectly minister to self-preservation; 3. Those activities which have for their end the rearing and discipline of offspring; 4. Those activities which are involved in the maintenance of proper social and political relations; 5. Those miscellaneous activities which make up the leisure part of life, devoted to the gratification of the tastes and feelings.

Spencer, Herbert, *Education* (New York, Burt), pp. 16, 18.

360

The Curriculum and Social Philosophy

For example, let a people esteem cultured idleness for a favored class to be the highest ideal for society, and at once we have the "classes" and the "masses" in the making, and ultimately at war with each other. Let material wealth be the chief measure of success, let the commercial ideal dominate, and we are quite sure to run short on poets, musicians, and philosophers while we have a plethora of captains of industry, promoters, and merchant princes. We cannot continuously give kings of commerce chief place in social rewards and esteem without robbing ourselves of Angelos, Shakespeares, and da Vincis. Nor can we make our supreme care that of living in material luxury and ostentation, careless of the furnishing of the mind and the enrichment of the spirit, without suffering atrophy of the highest and best powers of human nature.

In the main, the youth of any generation will prize and strive to possess themselves of the things which their generation prizes and possesses. Inescapably their scale of values has a tendency to be formed in accordance with custom and social standard. Let those customs and standards be low, let them be unfit to determine the objectives for youth's ambitions, and the only way to save youth from their bad effects is through education, that is through the curriculum and its teaching.

If this conclusion seems in conflict with the principle that the curriculum must in general reflect the social process of its day, that it must prepare the individual to fit into that social process, let it be remembered that the values that are most obvious, the claims upon ambition and energy which are most immediately insistent and inescapable, do not always represent the truer, deeper judgment of society as to what is worth while. No one now stops to consider what income tax would under present rates be due from Abraham Lincoln, or whether George Washington belonged to exclusive social clubs, or whether William Shakespeare had a private yacht. Time is a relentless sifter of values. And religious curriculum, consisting as it does in large measure of tested values, and offering the sober second judgment of society as to what is more worth while in its own spiritual achievement, is a necessary antidote to the overemphasis which inevitably attaches to the clamant present.

Betts, George Herbert, *The Curriculum of Religious Education* (New York, Abingdon, 1924), pp. 290-291.

361

What the Curriculum Involves

By the presuppositions of education are meant those things without which the educational process cannot go on. Those in number are four, viz., the pupil, the curriculum, the educational environment, and the teacher. They cannot be further reduced; the simplest educational situation, even Garfield's famous description of a college as Mark Hopkins on one end of a log and a student on the other, involves these four elements. The efficiency of the educational process is conditioned by the efficiency and harmony of these cooperating parts.

The curriculum is that which the pupil is taught. It involves more than the acts of learning and quiet study; it involves occupations, productions, achievements, exercise, activity. It thus is representative of the motor as well as the sensory elements in the nervous system of the pupil. On the side of society it is representative of what the race has done in its contact with its world—the secrets of knowledge it has wrested from the bosoms of nature and man, the ideals of the imagination it has embodied in permanent forms of art, and the deeds of man's will that have changed the face of nature and the character of human society.

Horne, Herman Harrell, *The Psychological Principles of Education* (London, Macmillan, 1928), pp. 31-32.

362

Social Efficiency, the Standard

Social efficiency, then, is the standard by which the forces of education must select the experiences that are to be impressed upon the individual. Every subject of instruction, every item of knowledge, every form of reaction, every detail of habit, must be measured by this yardstick. Not, What pleasure will this bring to the individual, not, In what manner will this contribute to his harmonious development, not, What effect will that have upon his bread-winning capacity,—but always, Will this subject, or this knowledge, or this reaction, or this habit so function in his after-life that society will maximally profit?

BAGLEY, WILLIAM C., *The Educative Process* (New York, Macmillan, 1916), p. 60.

363

The Curriculum Problem Fundamental

The fundamental problem in education is the curriculum. What should be taught to a large extent determines the organization of our schools, the building and equipment, the methods used, and the value of the schools to the community. Always recognized as important, it has in recent years, because of a changed conception of discipline, become paramount. . . .

At present there is general concern about the curriculum. The public to some extent, though inadequately, realizes that changes in the school population and the developments of modern life necessitate corresponding changes in subject matter; and professional school people know not only this but also that current practices are far from being in accord with accepted educational philosophy and proved educational psychology.

BRIGGS, THOMAS H., *Curriculum Problems* (New York, Macmillan, 1927), pp. 1, 3.

364

The Principle of Parallelism in Curriculum Construction

To make a school program for the new supercivilization out of antique intellectual heirlooms is like operating a hospital on the therapeutic practices of a century ago. Nor are we likely to derive much help from the curricular fads that start up from time to time. As a rule they lack orientation. Almost never do they root down into any fundamental principle. And we may expect a succession of curricular fads until we do succeed in establishing fundamental principles upon which we can all agree. To a sociologist the principle of parallelism commends itself as meeting the requirement; and hence it would seem that principle cannot be too insistently repeated in theory nor too rigorously applied in practice. If the school is to function vitally its program of studies must epitomize the civilization itself—omitting only such parts of it as the social process will transmit automatically through social participation—and including no extraneous material. Curriculum makers must not be satisfied with a pedantic and irrelevant lore, however fragrant with the romance of a bygone aristocracy; nor with a series of projects, however interesting, that are devoid of vital correlation with the social process. The curriculum must impart the information necessary to the operation of our institutions on an intellectual level commensurate with the new supercivilization. Nothing will so quickly dispel the fog that hangs over the curricular problem as the clear light of this principle of parallelism.

Finney, Ross L., *A Sociological Philosophy of Education* (New York, Macmillan, 1929), pp. 165-166.

365

The Curriculum a Practical Working Tool

A curriculum holds the same position of relative importance in an educational system as money and prices hold in our economic life. All the forces of our environment play upon it and make out of an apparently indefinite, incoherent mass of social influences, a definite, concrete, educational standard in the form of a curriculum. Both are the practical working tools of great social institutions, and as such demand that they be not tampered with except by methods in keeping with the importance of their strategic positions.

Galloway, Lee, in the *Second Yearbook* of the Eastern Commercial Teachers' Association (New York, 1929), p. 21.

366

The New Curriculum and the Old

Someone will ask what is wrong with our present secondary school curriculum. It represents the accumulation of a great many knowledges and skills organized into systems, not from the point of view of the needs of the pupil, but from that of the specialist who enjoys knowing a particular field of knowledges and skills for their own sake.

The new curriculum will be based not on tradition, but on analysis. After the analysis of the life-activities, including the needs of the adolescent, has been made in sufficient detail to give attainable units, several steps are necessary. They need to be sorted as to their importance. Perhaps some can best be learned at home. Opinions will differ in regard to this matter.

Owen, Ralph Dornfeld, *Principles of Adolescent Education* (New York, Ronald, 1929), p. 239.

367

A Broader Interpretation of the Curriculum Necessary

The curriculum represents the experiences in which pupils are expected to engage in school and the general order of sequence in which these experiences are to come. Very generally, the curriculum has consisted of the material found valuable in carrying on life's activities in the best way, but it has been presented apart or separate from the uses which it serves in these life pursuits. There has been an assumption that the activity chiefly called upon was learning the material represented by the curriculum so that it could be expressed in oral or written form. The school's problems were those of developing a small number of skills in interpreting symbols and expressing meanings by their use—reading, spelling, etc.; memorizing the content of some textbooks, as in geography, history, and science; and of conducting some manual activity to develop dexterity and to aid in the understanding of some ideas and principles, as by work in laboratory, shop, and garden. Many of these elements, processes, and principles used in carrying on the real activities of life were included in the curriculum, but without relationship to the activities themselves. It was assumed that if this content were learned in an orderly sequence of steps in school the pupil himself would see the relationship of its respective parts to definite life situations and use these as needs called for them. But the results of a curriculum which so completely isolated the content and method of school experiences from out of school life have shown that this assumption is not adequately valid. Few definite connections or bonds in mental life between the material and its uses were made or developed.

Both the development of principles in psychology and the results of many and extended plans of experimental practice lead to the conclusion that a broader interpretation of the curriculum is necessary. If the purpose of the curriculum is to furnish aid in the selection and promotion of experiences of the largest life values, then the curriculum must include not only the essential facts, principles and processes found useful in the daily conduct of life, but also the activities required. Throughout the whole range of present-day problems and interests the curriculum should include both the kinds of situations calling for subject matter in the usual sense of that term and the subject matter which the respective situations require. The curriculum then becomes the projects inclusive of the essentials of race experience and the helps necessary to engage in these projects with success and efficiency.

Bonser, Frederick G., *Elementary School Curriculum* (New York, Macmillan, 1921), pp. 1-3.

368

The Function of the Curriculum

The function of the curriculum is to make sure through its varied and rich content that our children shall thrill with the great concepts upon which the race has put its best efforts and thought; that they shall be urged by the great ideals which have governed our predecessors at their best; that they shall be inspired by the great acts of those whose experiences constitute the highest spiritual culture of the ages.

Betts, George Herbert, *The Curriculum of Religious Education* (New York, Abingdon, 1924), p. 263.

369

The Curriculum and Social Life

The curriculum is no longer a sacred inheritance, possessing absolute and permanent validity, the contents of which the child must master in order to attain to an education and to be admitted to the charmed circle of the cultured. The curriculum becomes but the epitomized representation to the child of this cultural inheritance of the race—of those products of human experience which enter into the higher and better life of man and which the present generation esteem to be of value to the individual and of worth to society as a whole. Such an appraisement of the value of life must change from generation to generation, if there is to be progress in life; if life in the present has any value in itself beyond mere existence, culture cannot be the same for the twentieth century that it was for the eighteenth. The curriculum must present to the child in idealized form, present life, present social activities, present ethical aspirations, present appreciation of the cultural value of the past.

Monroe, Paul, *Brief Course in the History of Education* (New York, Macmillan, 1922), p. 407.

370

Both Permanent and Changing Values in the Curriculum

The curriculum of the school was briefly described . . . as representing an epitome of man's life. Its materials spring from all times and places, and consist of those traditions and achievements of the race that have proved and are still proving to be of value in increasing the efficiency and richness of both social and individual life. These traditions and achievements are not necessarily all represented in the curriculum, but only those need to be there that cannot be efficiently acquired in the round of one's daily life and amusements. The curriculum thus becomes one of the avenues to a balanced and relatively complete human life. It is a means to an end, and has from this point of view been called the gateway to the life of the species.

The curriculum being a means to an end, it must necessarily vary as the end varies. Its content is determined by the life and environment for which it is to prepare. The monarchy cannot realize its ideals through the same curriculum as a democracy, and the curricula of both must vary as their ideals, their social and industrial conditions, and the content of knowledge vary. But within this changing mass there is always a relatively stable core. A monarchy and a democracy may remain a monarchy and a democracy, while in addition a number of fundamental aspects of human life have been everywhere much the same throughout history. It becomes the task of the school, therefore, to meet at the same time both varying and relatively permanent conditions.

The most fundamental criterion for the selection of subject matter, then, is the pertinence to present life. For a study to be admitted to the curriculum it must be clear that modern life demands it on the basis of one or more of intrinsic values, . . . and for a study to be retained it must likewise be clear that life still demands it for one or more of those values.

RUEDIGER, WILLIAM C., *Principles of Education* (Boston, Houghton Mifflin, 1910), pp. 167-168.

371

The Curriculum Is Experience under Intelligent and Purposeful Control

It follows that, since persons realize themselves in and through meaningful, integrated, and controlled experience, the approach to the assistance of persons in the attainment of an effective and satisfying individual life must be through continuous reconstruction of individual and social experience. Such redirection of experience will assume, on the whole, two aspects: enrichment, on the one hand, and self-conscious and self-directive control, on the other. Enrichment will be accomplished by assisting the growing person to give meaning to his experience and range and depth to its content, and by causing it to contribute to the realization of his chosen ends. Control will be accomplished by assisting the growing person clearly to define his objectives, to organize his values, and to bring his experience under the influence of an organized and dominant purpose. The concepts of persons, experience, enrichment, adjustment, and control are of such fundamental importance to the present discussion that they must be considered later in greater detail. It will suffice in this connection to state the general point of view in each instance. . . .

From this point of view, the curriculum has its beginning, its continuance, and its end in a forward-moving and worthful experience. Its content is determined by the content of experience. Its organization is determined by the way in which experience moves forward toward the objectives of self-realizing persons. That is to say, the curriculum is experience under intelligent and purposeful control.

Bower, William Clayton, *The Curriculum of Religious Education* (New York, Scribner, 1925), pp. 35-36.

372

School Studies Should Be Organized on a Life Basis

We have been looking for a working basis, a ground plan, for the reconstruction of our elementary curriculum. We need the basal types of activity which objectively represent the large world forces in action. As ongoing projects they are the tangible expressions of the influences which are controlling and organizing our environment. They are surcharged with the best quality of organizing thought. They are not rule of thumb performances but directed, rational activities following progressively the main channels of active enterprise in the world.

Organization of school studies on a life basis has two aspects: first, the natural grouping of knowledge into a single project for immediate classroom purposes in the progress of learning; second, the grouping and the organization of these large copies connectedly forming a sequence extending through the whole curriculum.

McMurry, Charles A., *How to Organize the Curriculum* (New York, Macmillan, 1923), pp. 57-58.

373

The Curriculum Should Reflect All of the Aims of Life and Education

It is the fundamental nature of life to realize itself more abundantly. It is likewise the aim of education to lead progressively into ever widening and deepening experiences. To live an increasingly rich and worthy life is therefore at once the broad, inclusive aim of all endeavor in both life and education. When present needs are satisfied, it is important that new needs should make an appeal, and that these in turn, when satisfied, should still point forward to new experiences. To develop this many-sided interest in children the curriculum should stimulate participation in every form of worthy activity and reveal the large possibilities for going on and on through all the years of life, increasingly experiencing the values of science, literature, art, and all other forms of interest contributed by the past or developed by the future. The schools have not wholly escaped the danger of producing arrested development by cultivating a routine of habits which, when followed long, results in an attitude of apathetic contentment. The curriculum must be shot through and through with the interests, activities, and ideals which ever appeal and lead us forward into larger realizations of life and which fill us with the zest and earnestness of youth as long as life shall last. Poor, indeed, have been the curricula of the elementary schools when measured by the possibilities potential in the richness of the race inheritance. Children and adults have gone through life without having been even made aware of the interesting and life-giving content of science, literature, history and the arts. The most fundamentally potent ideal in this presentation is that of enriching and energizing the experiences of childhood that there may be a greater abundance and nobility of life as a whole.

Bonser, Frederick G., *The Elementary School Curriculum* (New York, Macmillan, 1921), p. 24.

CHAPTER XVI

The Problem of Method

NOWHERE has modern education made more progress than in the field of method. This is true in all stages of public education and especially in elementary education. A century or more ago it was not at all uncommon for a child to spend a year or more in learning his letters and somehow learning to read by means of the methods and material then used. Today a skilful teacher trained in modern methods will in a year's time teach a class of normal First Grade children to read not only one interesting beginner's book but a number of others besides. Most of the credit for this progress belongs to the psychologist and the experimentalist in education.

The selections in this chapter deal with the subject of method in general. As pointed out by Kilpatrick (374), there is a narrow and a wider sense in which the term method is used. Method in the narrow sense falls in the field of science; in the wider sense it belongs in the field of philosophy. The quotation from Kandel (375) presents a sort of historical setting with reference to the development of method in American education. The student will find Kagawa's art of teaching interesting and suggestive (376). The reading from Fitch (377) on freshness of mind in method emphasizes an important truth. Suggestions on method from ancient and modern writers are found throughout the chapter. Besides the quotations already referred to, the student should note especially those from Bode and Finney (386, 396).

374

The Narrow and the Wider Sense of Method

The narrow sense of method singles out for consideration one specific thing to be learned and for the time being pays exclusive attention to that as if it were the *only* thing going on at that time. The wider sense of method knows that in actual life one thing never goes on by itself. This wider method demands that we consider the actual facts, the real world. The narrow sense of method faces always an abstraction, an unreality—a part of a total situation, a part that can no more exist by itself than could a man's head continue to live apart from his body. We have to make such abstractions for the sake of economy in studying; but we should know what we are doing—we must never make the mistake of supposing the abstracted element is real life. The problem of method in the wider sense is thus very general: How shall we treat children, since whether we like it or not they are going to learn well or ill not only the thing we choose to set them at, but also at the same time a great many other things perhaps of far greater importance? . . .

We do thus have these two problems of method, one narrow, the other wide: one has to do with learning the details, as such, that go to make up education; the other concerns education as a whole, education considered as the correlative of the whole of life. We can and must study both. The psychologist and experimental educator will help most on the first problem, the problem of method in its narrow sense. The second problem is in a way the problem of life itself. The answer to the second problem, the wider problem of method, will depend on the answer we give to the problems of life.

KILPATRICK, WILLIAM H., *Foundations of Method* (New York, Macmillan, 1932), pp. 10-12.

375

General Theories of Method

Perhaps Professor Frank M. McMurry of Teachers College has had a more extensive influence on public school practice than any living leader of educational thought, for he has contributed both as a great teacher of method and as a leader in each of the great method periods, the Herbartian and the functional. He was a pioneer of the American school of Herbart, a ready debater and interpreter of "apperception," "application" (use), "correlation," "concentration," when they were meeting with vigorous opposition in the National Society gatherings. In 1892-96 particularly, he appeared repeatedly on the program of the National Education Association, as well as of the Herbart Club, in defense of them. His *Method of the Recitation,* 1903, written with his brother Charles, was widely used in education classes everywhere; while his special method studies, especially his recent work in geography, are notable contributions. But his name is most generally associated as a contemporary in thought with that of Professor Dewey with his own formulation of the principles of study methods from a functional point of view, as found in *How to Study and Teaching How to Study,* 1907, with his numerous treatments of effective study methods which follow this book, and with his work at Columbia University.

In this how-to-study emphasis he sees the fundamental principles of method applied. "How shall one learn alone?" is a more important question than "What shall I teach today?" Study or learning to work alone comes in "the vigorous application of the mind to a subject for the satisfaction of a felt need. . . . Instead of being aimless, every portion of effort put forth is an organic step toward the accomplishment of a specific purpose. Instead of being passive, it requires the reaction of the self upon the ideas presented until they are supplemented, organized, and tentatively judged so that they are held well in memory. The study of a subject has not reached its end till the guiding purpose has been accomplished and the knowledge has been so assimilated that it has been used in a normal way and has become experience . . . until precautions for the preservations of individuality have been included" (p. 283). The factors of study methods are (1) specific purposes; (2) need of supplementing thought; (3) organization of ideas; (4) weighing values; (5) memorizing; (6) application of ideas; (7) a tentative attitude toward truth; (8) self-activity, self-control, self-expression, independence.

Among the first to apply the functional view to methods of teaching was Professor W. W. Charters, whose *Methods of Teaching Developed from a Functional View-Point* was published in 1909, and later, in 1913, popularized as *Teaching the Common Branches*. There were many who attacked the problem of making the curriculum conform to this point of view—attempting to reorganize school knowledge so as to make it less "foreign" to a normal child's interest. "If we seek the kingdom of heaven educationally," as Professor Dewey puts it, or if we "identify ourselves with real instincts and needs of childhood and ask only their fullest assertion and growth . . . all other things will be added unto us." From the standpoint of method, this means that the more closely related the curriculum is to these fundamental interests, the less need there will be for a conscious technique.

Perhaps the most significant movement in education that has yet arisen is this attempt to know the facts about how we learn, think, and feel and to base a pedagogy upon them.

Professor Horn of the University of Iowa, himself an experimental student of method, believes that method depends essentially on the subject-matter in a particular subject, that general method is a philosophical fantasy. He has said in a personal letter:

> It is my judgment that in the last ten years great advances in educational method have been made along the line of developing superior techniques of learning for each of the prominent subjects. We now know how to teach spelling and writing as accurately as physicians know the diagnosis and treatment of most of their diseases. We are making great strides in the improvement of reading. There has also been some improvement in our methods of teaching other prominent elementary school subjects. Most of these improvements can be ascribed to the application of scientific method, to the mak-

ing of the course of study, to the determination of economic methods, and to the discovery of the proper tests. As a result of these experimentations, we have made real strides in spite of the confusion created by those who are pushing the project method, and in spite of the inadequacy of this method. It is my judgment that any move in the direction of the establishment of a general method is necessarily fallacious. The way to learn to spell a word is not the way to learn to play on the piano. Even the motivation is not the same in any but a rhetorical sense of the word.

Professor William H. Kilpatrick of Teachers College is finding a place for a new ideal of method and has identified his name with a studied definition of project teaching. He acknowledges his indebtedness for his scientific or philosophical position to both Thorndike and Dewey, and has, through his classroom chiefly, aroused enthusiasm for a new conception of general method.

The project attitude is a natural outcome of these laws and our discussion of interests, motivation, and problem method. No one recognizes it as a discovery; but only the enthusiast thinks this new word an open sesame to successful application of all our highest ideals of method. No matter how near it is to the common practice of our schools of tomorrow, it is recognized that successful project teaching today demands extraordinary ability on the part of the teacher and taxes his resources to the utmost.

Kandel, Isaac L., *Twenty-Five Years in American Education* (New York, Macmillan, 1924), pp. 158-169.

376

Kagawa's Art of Teaching

When I teach children, I approach the task as an artist, and when standing before children I concentrate all my powers. Teaching is my act of creation. I never do my teaching with any feeling of distaste. When I play with children, I must not impose my way of playing upon them. Never must I forget that, however charming they are, the children are themselves central, and I cannot use them as I would use utensils, for myself. The child is my creation. Therefore, the task of teaching absorbs me completely.

Feeling thus, it appears to me when I observe teachers at their work, that there are multitudes of them who fail to have any consciousness of the artistry of teaching. They accordingly lack earnestness. People even take positions temporarily in schools as teachers. I fear that the teaching they do injures the children's minds. I cannot help hoping that the teachers in the elementary schools will follow their profession with somewhat more of the creative feeling.

In the next place, I would not, when teaching, have the children who are to be my creations regard me as their model. I put every ounce of my energy into my teaching. But when I sculpture a child, since he is to be my creation, I desire to produce something superior to my present self. Heretofore, in our education we have felt quite satisfied if the pupil became like the teacher, but in education as creation it does not do to fit the child into a certain mould. I must endeavor to find something in the child's soul which as yet has not been discovered. That is what creation means. It is just like digging a mine: men employ various devices until they reach the vein of ore. After that it becomes a process of getting out the ore. It is here that the difference between medieval and modern educational methods appears.

KAGAWA, TOYOHITO, *Love, The Law of Life* (Philadelphia, Winston, 1929), pp. 238-239.

377

Freshness of Mind in Method

There is indeed an abiding necessity for the application of fresh thought to every detail of school work. There is no method, however good, which does not want to be modified and reconstructed from time to time; no truth, however true, which does not need to be stated now and then in a new form, and to have fresh spirit infused into its application. It is true of rules of teaching as of higher matters, "The letter killeth, the spirit giveth life." But even this is not the whole truth. For the spirit is constantly tending to fix and embody itself and to become the letter, unless we are ever on our guard. We know how often it has happened in the history of religion that a great reforming movement, which has begun in the shape of a protest, and perhaps a very effective protest, against formalism and mechanical religion, has in time come to have its own watchwords and stereotyped usages, and has ended by being just as cold and unspiritual as that which it has sought to supersede. And this has been no less true in the history of education. The new thought, the bright rational method seeks to embody itself in a rule of action. While this process is going on, all is well. But when it is at an end, and the rule is arrived at, then comes the relapse into verbalism. Routine is always easier than intelligence. And some of the most worthless of all routine is—not the traditional routine of the medieval schools, which is known to be mechanical, and is accepted as such—but the routine at first devised by enthusiasts, and afterwards adopted by dull uninspired people, who think that they can learn the method of Socrates, of Arnold, or of Froebel as they could learn a system of calisthenics or of short-hand. *Corruptio optimi pessima est.* It is very touching to read M. Bichel Breal's account of a visit to Pestalozzi, at the end of his career. He describes the old man, pointing with his finger to the black-board, to his diagrams and to the names of the qualities of objects, while the children repeated mechanically his favorite watchwords, which they had learned by heart. Those words had once been full of meaning. But they had ceased to represent real intellectual activity on the children's part, or on his. They had become dead formulas, though he knew it not. And so it will ever be, with you and with me, if we lose the habit of looking at all our methods with fresh eyes, of revising them continually, and impregnating them anew with life. It would be a melancholy result of the humble and tentative efforts which, under the encouragement of the University, we are now seeking to make after an Art of teaching, if by them any of us were led to suppose that it was an art to be acquired by anybody once for all. In truth, though we may enter on the inheritance of some of the stored-up experience of others, each of us must in his own experience begin at the beginning, and be responsible for the adaptation of that experience to the special needs of his pupils, as well as to the claims of his own idiosyncracies and convictions. Nothing can ever be so effective as the voice, the enthusiasm, the personal influence of the living teacher. Without these, apparatus, pictures, helps, methods, degenerate soon into mere processes and a sterile mnemonic. And no set of rules, however good, can ever release us from the necessity of fashioning new rules, each for himself.

FITCH, SIR JOSHUA G., *Lectures on Teaching* (New York, Macmillan, 1885), pp. 34-35.

378

Making Learning Pleasant

I know there is a strong prejudice in some people's minds against the notion of making learning pleasant. They remind us that school should be a preparation for after-life. After-life will bring with it an immense amount of drudgery. If, they say, things at school are made too easy and pleasant (words, by the way, very often and very erroneously confounded), school will cease to give the proper discipline: boys will be turned out not knowing what hard work is, which, after all, is the most important lesson that can be taught them. In these views I sincerely concur, so far as this at least, that we want boys to work hard, and vigorously to go through the necessary drudgery, *i.e.*, labour in itself disagreeable. But this result is not attained by such a system as I have described. Boys do not learn to work *hard*, but in a dull, stupid way, with most of their faculties lying dormant, and though they are put through a vast quantity of drudgery, they seem as incapable of throwing any energy into it as prisoners on the tread-mill. I think we shall find on consideration, that no one succeeds in any occupation unless that occupation is interesting, either in itself or from some object that is to be obtained by means of it. Only when such an interest is aroused is energy possible. No one will deny that, as a rule, the most successful men are those for whom their employment has the greatest attractions. We should be sorry to give ourselves up to the treatment of a doctor who thought the study of disease mere drudgery, or a dentist who felt a strong repugnance to operating on teeth. No doubt the successful man in every pursuit has to go through a great deal of drudgery, but he has a general interest in the subject, which extends, partially at least, to its most wearisome details; his energy, too, is excited by the desire of what the drudgery will gain for him.

Quick, R. H., *Educational Reformers* (New York, Appleton, 1890), pp. 472-473.

379

We Learn to Do by Doing

What has to be done must be learned by practice. Artisans do not detail their apprentices with theories, but set them to do practical work at an early stage; thus they learn to forge by forging, to carve by carving, to paint by painting, and to dance by dancing. In schools, therefore, let the students learn to write by writing, to talk by talking, to sing by singing, and to reason by reasoning. In this way schools will become workshops humming with work, and students whose efforts prove successful will experience the truth of the proverb: "We give form to ourselves and to our materials at the same time."

Comenius, Johann Amos, *The Great Didactic* (Keatinge, editor; London, Black [American agent, Macmillan, New York], 1910), p. 194.

380

Training for a Life of Mental Effort

Our growing consciousness, again, of the relation between our socially inherited forms of intellectual behavior and our biological heritage of intellectual and emotional powers, should influence, not only our methods of adult mental self-direction, but also the methods of education of those who are trained in youth for a life of mental effort. School children should learn to recognize and undertake the conscious effort by which thought is made efficient, and to distinguish it, both from the automatic activity of recreative thought, and from the effortless "interest" stimulated in the members of a class by a skilled and "magnetic" teacher.

WALLAS, GRAHAM, *Our Social Heritage* (New Haven, Yale University Press, 1921), p. 45.

381

The Wider Problem of Method

The wider problem of method has to do with all the responses children make as they work, and its concern is to help children build the total of these responses into the best possible whole. The narrower problem concerns itself with how the children shall best learn this or that specific thing, generally named in advance. The wider problem concerns itself with all the responses being made. Since the older education limited itself to the narrow problem, the newer education stresses the wider problem without, however, overlooking the other. In particular the wider problem is much concerned to build attitudes and appreciations. In so doing, it builds the heart of the child; and out of the heart are the issues of life.

KILPATRICK, WILLIAM H., *Foundations of Method* (New York, Macmillan, 1925), p. 134.

382

Linking Knowledge with Life

Certainly there is no problem more fundamental or more perplexing than that which is involved in the effort to link what we call knowledge with the larger complex that we call life. To bring knowledge to the learner in the "natural setting" of a problem that the knowledge will help to solve, ought to effect this end if any educational procedure can effect it. That the project method as thus conceived has its limitations is obvious enough. . . . The layman's easy solutions for educational problems frequently involve a quite innocent disregard of practical obstacles. If some of our educational problems were so easy to dispose of as they may seem to be on the surface, it is safe to assume that they would not have remained so long unsolved.

Bagley, William C., "Editor's Introduction" to *The Project Method of Teaching,* by John Alford Stevenson (New York, Macmillan, 1921), pp. 14-15.

383

The Problem of Interest

Some sorts of knowledge are interesting to everybody; some interest only a few. The serious part of the case is, that the most valuable kinds of knowledge are often the least interesting.

Bain, Alexander, *Education as a Science* (New York, Appleton, 1908), p. 81.

384

J. S. Mill on Application

"A pupil from whom nothing is ever demanded which he cannot do, never does all he can. . . .

I do not believe that boys can be induced to apply themselves with vigor, and what is so much more difficult, perseverance, to dry and irksome studies by the sole force of persuasion and soft words. Much must be done, and much must be learnt by children, for which rigid discipline and known liability to punishment are indispensable as means. It is, no doubt, a very laudable effort in modern teaching to render as much as possible of what the young are required to learn, easy and interesting to them. But when this principle is pushed to the length of not requiring them to learn anything but what has been made easy and interesting, one of the chief objects of education is sacrificed. I rejoice in the decline of the old brutal and tyrannical system of teaching,—which, however, did succeed in enforcing habits of application; but the new, as it seems to me, is training up a race of men who will be incapable of doing anything which is disagreeable to them."

Quoted in Hinsdale, Burke A., *Schools and Studies* (Boston, Osgood, 1884), pp. 38-39.

385

One Requirement of a Real Project

In a real project the connection between studying and carrying on the job must be sufficiently close so that the job determines directly what is to be studied and gives opportunity to try out the new knowledge from time to time. The studying and the job must proceed abreast.

Bode, Boyd H., *Modern Educational Theories* (New York, Macmillan, 1927), p. 148.

386

Limitations of the Project Method

It does not follow, however, that the project method, in the sense in which we are using the term just now, can be made to cover the whole field. However cordially its merits may be recognized, as a universal method it suffers from certain obvious defects. By definition it takes no account of either logical organization or "social insight." Its spirit is the spirit of immediate practicality, which is the spirit of an exclusive vocationalism. This is no objection to the method, unless we apply it too widely. If we do so, we find that our practicality overreaches itself. Learning that is limited to this method is too discontinuous, too random and haphazard, too immediate in its function, unless we supplement it with something else. Perhaps children may learn a great deal about numbers from running a play store or bank, but this alone does not give them the insight into the mathematics that they need to have. They may learn a great mass of historical facts from staging a play, but this is not a substitute for a systematic study of history. Learning for immediate purposes, or incidental learning, is too much a hit-and-miss affair—it dips in here and there, but it gives no satisfactory perspective, no firm hold on fundamental principles.

Bode, Boyd H., *Modern Educational Theories* (New York, Macmillan, 1927), pp. 150-151.

387

We Prove by Logic; We Discover by Intuition

The principal aim of mathematical education is to develop certain faculties of the mind, and among these intuition is not the least precious. It is through it that the mathematical world remains in touch with the real world, and even if pure mathematics could do without it, we should still have to have recourse to it to fill up the gulf that separates the symbol from reality. The practitioner will always need it, and for every pure geometrician there must be a hundred practitioners.

The engineer must receive a complete mathematical training, but of what use is it to be to him, except to enable him to see the different aspects of things and to see them quickly? He has no time to split hairs. In the complex physical objects that present themselves to him, he must promptly recognize the point where he can apply the mathematical instruments we have put in his hands. How could he do this if we left between the former and the latter that deep gulf dug by the logicians?

Beside the future engineers are other less numerous pupils, destined in their turn to become teachers, and so they must go to the very root of the matter; a profound and exact knowledge of first principles is above all indispensable for them. But that is no reason for not cultivating their intuition, for they would form a wrong idea of the science if they never looked at it on more than one side, and, besides, they could not develop in their pupils a quality they did not possess themselves.

For the pure geometrician himself this faculty is necessary: it is by logic that we prove, but by intuition that we discover. To know how to criticize is good, but to know how to create is better. You know how to recognize whether a combination is correct, but much use this will be if you do not possess the art of selecting among all the possible combinations. Logic teaches us that on such and such a road we are sure of not meeting an obstacle; it does not tell us which is the road that leads to the desired end. For this it is necessary to see the end from afar, and the faculty which teaches us to see is intuition. Without it, the geometrician would be like a writer well up in grammar but destitute of ideas. Now how is this faculty to develop, if, as soon as it shows itself, it is hounded out and proscribed, if we learn to distrust it before we know what good can be got from it?

And here let me insert a parenthesis to insist on the importance of written exercises. Compositions in writing are perhaps not given sufficient prominence in certain examinations. In the *Ecole Polytechnique*, for instance, I am told that insistence on such compositions would close the door to very good pupils who know their subject and understand it very well, and yet are incapable of applying it in the smallest degree. I said just above that the word understand has several meanings. Such pupils only understand in the first sense of the word, and we have just seen that this is not sufficient to make either an engineer or a geometrician. Well, since we have to make a choice, I prefer to choose those who understand thoroughly.

POINCARÉ, HENRI, *Science and Method* (translated by Francis Maitland; New York, Science Press), pp. 128-130.

388

A First Lesson in Geography a Century Ago

What place do you live in? Is it a town or a city you live in? What is a town? What is a city? Which way is North? Which South? Which way is East? Which West? Have you ever been in any other town or city than the one you live in? If you have, what was the name of that town? In going to that town, which way did you go? What town lies next the place in which you live, on the North? What town is next, on the East? What next, on the West? What next, on the South? What County do you live in? Do you know what a County is? What State do you live in?

GOODRICH, SAMUEL G., *Peter Parley's Geography for Children* (Hartford, Huntingdon, 1836), p. 8.

389

Plato on Learning by Compulsion

"Everything then relating to arithmetic and geometry, and all the previous instruction which they should receive before they learn dialectics, ought to be set before them while they are children, and on such a plan of teaching, that they may learn without compulsion. Why so? Because, said I, a free man ought to acquire no training under slavery; for the labors of the body when endured through compulsion do not at all deteriorate the body; but for the soul, it can endure no compulsory discipline. True, said he. Do not then, said I, my best of friends, force boys to their learning; but train them up by amusement, that you may be better able to discern the character of each one's genius."

PLATO, *Republic,* in *Barnard's American Journal of Education* (Vol. IV, p. 166).

390

Quintilian on Method

Above all things we must take care that the child, who is not yet old enough to love his studies, does not come to hate them and dread the bitterness which he has once tasted, even when the years of infancy are left behind. His studies must be made an amusement; he must be questioned and praised and taught to rejoice when he has done well; sometimes, too, when he refuses instruction, it should be given to some other to excite his envy; at times also he must be engaged in competition and should be allowed to believe himself successful more often than not, while he should be encouraged to do his best by such rewards as may appeal to his tender years.

QUINTILIAN, *Institutes of Oratory* (translated by Butler; New York, Putnam, 1921), Book 1: 1: 20.

391

Methods Based on the Nature of the Child

Methods are no longer to be thought of as mere catches or devices for holding the pupil's interest while we pour ideas into his passive or neutral mind. Ingenuity is, of course, of real value to a teacher, for the teaching process can never be a merely mechanical cutting of cloth according to a pattern. But ingenuity should be in the service of insight. In the absence of educational principles, mere devices soon degenerate into vices. Sound methods grow directly out of the inmost nature of the child and of the world in which he is to realize himself. They are simply expressions of the nature of reality; they are the laws of the child's self-realization making themselves effective through us who teach.

Coe, George A., *Education in Religion and Morals* (Chicago, Revell, 1904), p. 97.

392

A Record

The following record was kept by a Swabian schoolmaster named Hauberle. It extends over fifty-one years and seven months' experience as a teacher: 911,527 blows with a cane; 124,010 with a rod; 20,989 with a ruler; 136,715 with the hand; 10,295 over the mouth; 7,905 boxes on the ear; 1,115,800 slaps on the head; 22,763 nota benes with Bible, Catechism, hymnbook, and grammar; 777 times boys had to kneel on peas; 613 times on triangular blocks of wood; 5,001 had to carry a timber mare; and 1,701 hold the rod high; the last two being punishments of his own invention. Of the blows with the cane 800,000 were for Latin vowels, and 76,000 of those with the rod for Bible verses and hymns. He used a scolding vocabulary of over 3,000 terms of which one-third were of his own invention.

Kuehner, Quincy A., *The Evolution of the Modern Concept of School Discipline* (Allentown, Weaber, 1913), p. 10.

393

Learn the Method of Nature

On the other hand who does not see that the helplessness of early life puts so many restraints on children that it is barbarous to add to this enthrallment that of our own caprices, by depriving them of a liberty so contracted, which they can so little abuse, and of which they can be deprived with so little advantage to them and to us? If there is no object so ridiculous as a haughty child there is none so pitiable as a timorous child. Since civil servitude begins at the age of reason, why anticipate it by private servitude? Let us allow life to have a moment's exemption from that yoke that has not been imposed on us by Nature, and leave to infancy the exercise of that natural liberty which diverts the child, at least for a time, from the vices that are contracted with slavery. Then let those harsh tutors and those fathers who are enslaved to their children come forward with their objections, and before vaunting their methods let them once learn the Method of Nature.

ROUSSEAU, JEAN JACQUES, *Emile* (translated by Payne; New York, Appleton, 1914), p. 51.

394

How to Elucidate Complex Problems

Analysis of a complex concept into its elements, the explicit setting forth what it is and what it is not, followed by the synthesis of the parts into a thought-unit, is the plan pursued by the best teachers in teaching difficult subjects. By analysis we resolve complex concepts into their elements, which may be simple precepts or their relations. Things are separated in thought which go together in time, space, motion, force, or substance. Every essential attribute or constituent can then be viewed by itself until the mind has gone around it with the bounding line of thought, grasped its nature and essence, and explored it in its different aspects and relations. In this way the most abstruse subjects are shorn of their difficulties, the most complex problems are solved and elucidated.

SCHAEFFER, NATHAN C., *Thinking and Learning to Think* (Philadelphia, Lippincott, 1901), p. 79.

395

Method Is the Manner in Which Material Is Used to Attain Some End

Speaking before a group of educators, an eminent university professor opened his address with the statement that he thanked the Gods he had never studied "methods of teaching." Strange to say, this same individual would have been among the first to bear grateful testimony to the benefit he derived from a painstaking study of the methods of research. Yet "method" in instruction does not differ in its essential nature from "method" in any other activity. When the cook proceeds to make an omelet, when the carpenter proceeds to make a cabinet, when the physicist proceeds to investigate the properties of matter, and when the teacher proceeds to make clear the meaning of democracy, each in his respective activity employs a particular method. By an analysis of these various activities the nature of method becomes apparent. Method is nothing more than a form of procedure; it is the manner in which the individual uses the material at his disposal to produce or attain some end.

CHAPMAN, JAMES C., and COUNTS, GEORGE S., *Principles of Education* (Boston, Houghton Mifflin, 1924), pp. 540-541.

396

Necessity for Motivation

On scarcely any other pedagogical subject has there been more discussion during the past generation than on the subject of motivation, including the interest-effort dilemma, of which motivation is the practical phase. But much of this discussion is dogmatic or controversial; and the resulting theories require an admixture of common sense upon the part of the classroom teacher to make them work without too much obvious damage. Now, for harmonizing the disagreements arising out of this discussion, nothing is more promising than a clear insight into the social situation that has given rise to the necessity for motivation. Such an insight is to be sought in the perspective of social evolution. We have schools precisely because we have left savagery behind, and risen to the level of civilization. Savage societies have no schools; they have no need of them. Not that schools are an incidental accessory of civilization, like white collars and door bells; they are a fundamental necessity of the social processes of civilized life. This is because civilization differs from savagery in the use of an elaborate cognitive capital which absolutely must be learned by the candidate *before* he can participate successfully or helpfully in the civilized social process. Moreover, much of this necessary cognitive equipment is difficult to learn because it makes little or no instinctive appeal. Hence the necessity for some organized program by which society can assure itself that each successive quota of on-coming candidates shall actually have acquired this equipment by the time they are called upon to use it as adult participants. In savage societies it is true that education is life, not preparation for life; but that is true only in savage societies. And it is true there because the social process utilizes so little knowledge that a mere school-less education will impart it all. But in civilized societies preparation is exactly what formal schooling is; and no pedagogical epigram, however terse and tasty, can make anything else out of it without denaturing it. And this is apparent to common sense exactly in proportion as we involve definitely the knowledge needed by the candidate for successful participation.

Now it is just this inherent nature of civilized education that gives rise to the interest-effort dilemma and the necessity for motivation. A curriculum that offered the child only what was naturally interesting to him would be a worthless curriculum, because it would leave him unprepared for civilized life.

FINNEY, ROSS L., *A Sociological Philosophy of Education* (New York, Macmillan, 1928), pp. 363-364.

CHAPTER XVII

The Role of the Teacher

A PERSON'S conception of the part played by the teacher in the educative process depends largely upon his philosophy of education. In a pragmatic philosophy of education the role of the teacher is chiefly that of modifying stimuli and providing suitable environment. In a personalistic, in distinction from a pragmatic, philosophy of education, as Horne says, "The teacher not only supplies environment but is environment, not only modifies stimuli, but is a stimulus. His contacts with his pupils are not only indirect through a situation he is handling, but direct with a person in whom he is interested. And the responses of the pupil are not only to the stimuli of an impersonal situation but to the stimuli of a personal guide and friend." [1]

Most of the quotations in this chapter represent the personalistic point of view. Of course the new type of teacher does conceive his role as that of modifying stimuli and providing suitable environment, and all teachers have always done this to some extent. But all types of teachers, as numerous statements in the chapter remind us, also have a personal influence on the lives of their pupils, and no kind of educational philosophy should fail to emphasize this basic fact. The writer hopes that teachers and students of education will find a careful reading of this chapter both suggestive and helpful. Special attention is called to selections 398, 400, 401, 422, 424, and 425.

---

[1] *The Democratic Philosophy of Education,* Macmillan, New York, p. 236.

397

Guarino on the Choice of a Master

"In the choice of a Master we ought to remember that his position should carry with it something of the authority of a father; for unless respect be paid to the man and to his office regard will not be had to his words. Our forefathers were certainly right in basing the relation of teacher and pupil upon the foundation of filial reverence on the one part and fatherly affection on the other. Thus the instinct of Alexander of Macedon was a sound one which led him to say that, whilst he owed to his father Philip the gift of life, he owed to his tutor Aristotle an equal debt, namely, the knowledge how to use it. Care must be taken therefore from the outset to avoid a wrong choice of master; one, for instance, who is ill-bred, or ill-educated. Such a one may by bad teaching waste precious years of a boy's life; not only is nothing rightly learned, but much of that which passes as instruction needs to be undone again, as Timotheus said long ago. Faults, moreover, imbibed in early years, as Horace reminds us, are by no means easy to eradicate. Next, the master must not be prone to flogging as an inducement to learning. It is an indignity to a free-born youth, and its infliction renders learning itself repulsive, and the mere dread of it provokes to unworthy evasions on the part of timorous boys. The scholar is thus morally and intellectually injured, the master is deceived, and the discipline altogether fails of its purpose. The habitual instrument of the teacher must be kindness, though punishment should be retained as it were in the background as a final resource. In the case of elder boys, emulation and the sense of shame, which shrinks from the discredit of failure, may be relied upon. I advise also that boys, at this stage, work two together with a view to encouraging a healthy spirit of rivalry between them, from which much benefit may be expected. Large classes should be discouraged, especially for beginners, for although a fair average excellence may be apparently secured, thorough grounding, which is so important, is impossible. In the case of more advanced pupils, however, numbers tend rather to stimulate the teacher."

Woodward, William Harrison, *Vittorino Da Feltre and Other Humanist Educators* (Cambridge, England, University Press [American agent, Macmillan, New York], 1912), pp. 162-163.

398

Some Qualifications of a Teacher

A knowledge of fundamental processes demands that the teacher have a thorough scholarship, not alone of advanced theories but of elementary principles. A knowledge and habit of good forms of speech and of social conventions is a necessary implication of this. Worthy home membership suggests that the teacher be one of right ideals and attitudes regarding the home and the relations of young people. The teacher careless of the proprieties whereby the home is safe-guarded is an unsuitable leader for the adolescent. Why not include at least one exemplary married woman, especially in the home economics department? From the standpoint of vocation, it is but reasonable to demand that the teacher have a good degree of professional spirit; an attitude which will give the pupils an appreciation of life callings as opportunities for service, worthy of the best one can render, rather than merely as jobs by means of which to get a living. In a similar way, the teacher should be one who is not potentially but in interest and action a member of the body politic—a real force for the best in civic life.

The worthy use of leisure must find exemplification in the teacher. The old notion of the teacher whose great virtue is his complete absorption in his books need not be superseded by that of the teacher who employs leisure in idleness or unwise activities. The one who can recreate wisely as well as work wisely, who can exemplify good sport and amusement and good reading habits, should be the type to set before young people who are all too ready to think of leisure as something to be squandered at pleasure. Ethical character is usually recognized as a qualification of the teacher, but too often it is taken to mean a neutral sort of quality, by virtue of which the person does nothing bad, and not much that is good. The teacher with a really good character is the one who is a positive force for good, and is able to supply a concrete example of good ideals and conduct. The last objective, leadership, involves these, but goes beyond them. The teacher who not merely is good but is able to make goodness popular, who not only is a good student and citizen and worker but can lead others to become so, inevitably attains a high position in the institutional life, and can teach leadership as only a leader can teach it. Indeed, he cannot but teach it, though the more consciously and purposively the more effectively.

Foster, Herbert H., *High School Administration* (New York, Century, 1928), pp. 71-72.

399

Teaching Cannot Be Learned by Demonstration

I confess that I am somewhat sceptical about the training of teachers; it seems to me like training people to become good conversationalists. The receipt is to know the subject you are teaching, and to have a lively, genial, and effective personality. It seems to me that it is an art which cannot be learnt by demonstration. To train a man to teach, without confronting him with a class of his own, in stern isolation, with no one to assist him in a crisis, with no authority but his own to fall back upon, is like teaching a man to swim upon dry land. Even a profound knowledge of the subject is comparatively unimportant except in advanced work; a brisk, idle man with a knack of exposition and the art of clear statement can be a scandalously effective teacher. In fact, the more profound the knowledge of the teacher is, the more risk there is of his being unable to sympathize with the difficulties of boys, and of his being incapable of conceiving the possible depths of their ignorance. The perfect combination is sound knowledge, endless patience, and inexhaustible sympathy. A man who can keep the boys interested and amused, who can appreciate the slender nuances which differentiate the work of a boy who has tried to learn his lesson from the work of a boy who has just done enough to pass muster, will have a much greater effect on a class than a man whose knowledge is far deeper, but who has not the art of commanding attention, or of sympathizing with the unformed mind. The real difficulty is the question of discipline, and no one can possibly be an effective teacher who has to be always looking about for signs of inattention and misbehavior. And here lies the root of the matter. A man may have conducted classes satisfactorily at a training college where the disciplinary difficulty is non-existent, he may have seen and heard a lesson brilliantly conducted by an effective teacher, but when he is face to face with a class of his own, he may find that he has no real control, and that he cannot command the attention of the boys sufficiently to allow him to imitate the method he has seen successfully pursued. Moreover in teaching, which is above all things a spontaneous, a dramatic process, the method of conducting a lesson must be to a great extent a matter of idiosyncrasy. No one can form himself upon a model. Some masters have the art of exposition, and it matters little which method is employed, so long as the result is alertness and interest in the boy. The best training of all would be to be able to observe through a loop-hole the conducting of a lesson by a first-rate teacher—I say through a loop-hole, because there are many first-rate teachers, the edge of whose teaching would be dulled if the lesson had to be conducted in the presence of a critical observer. I have myself known a master whose teaching greatly impressed the headmaster whenever he visited the school room. The teacher in question was learned, accurate, and clear-headed; his questions were to the point, his explanations lucid; but the headmaster did not know that it was only his presence that kept the class in a submissive frame of mind, and that on ordinary occasions the time of the master was so fully occupied by an entirely unsuccessful attempt to keep the boys in order that he never had an opportunity of indulging in the lucid exposition of the lesson which had seemed so impressive.

Benson, Arthur C., *The Schoolmaster* (New York, Putnam, 1908), pp. 13-16.

400

The Modern Teacher a Student of His Calling

I distinguish the modern teacher from the teacher of twenty-five or thirty years ago as a person who desires to have at his command the results of that surprising period of research which entered upon its present stage about the year 1910. It is true that many of these results are not easily accessible, but part of them have been worked over into textbooks and curriculums and a still greater part into books on method. The modern teacher utilizes as much of the product of research as he can, but the amount he uses is perhaps less important than the spirit he displays. The modern teacher is, above all things, a student of his calling, and the aim of his studentship is expertness in his calling. For the present, therefore, we may consider that teacher as modern who is reasonably in the possession of the principles and technique of teaching and who possesses what I have called studentship in reference to his work.

For the purpose in hand I take it that statistics may be made to include all the numerical treatment of educational facts for which this modern teacher has, or ought to have, a direct use. This will include the record-making which lies at the basis of statistical technique. It will involve the ability to understand the terminology of educational reporting, the ability to record the facts of his experience according to this terminology, and the ability to work up the data into usable form.

Buckingham, Burdette R., *Research for Teachers* (Boston, Silver, 1926), p. 81.

401

Functions of Teacher Education

A program of teacher education has six main functions. These may be briefly described as follows:

The first function of a program of teacher education is to provide a reasonable mastery of the subject taught and of subject-matter related to it. The demands upon a teacher in any field require a broad and deep reservoir of knowledge which may serve not only his regular daily needs as a classroom teacher, but which may be used as an emergency supply of information and understanding. Parallelism, comparison, and contrasts are effective in their proper time and place in teaching. Hence the need for a reasonable mastery of related subject-matter in addition to scholarship in a given field of knowledge.

The second function of teacher education is to assist each prospective teacher in the formulation of a definite philosophy of education. This is the practical application of a philosophy of life to a special field of service. Human beings are guided by some standards of conduct, even though unconsciously. He who knows his purposes, outlines a plan of action, and executes a program of daily conduct in terms of his plan and purposes, achieves his goal. Education as the fundamental basis of social progress must have just this kind of leadership. And the followership must have an intelligent appreciation of the purposes, plans, and programs advocated by the leaders. Hence the importance of a definite philosophy of life and of its application to the field of education.

The third function of teacher education is to provide a thorough understanding of child nature. The teacher must understand the physical, mental, and emotional aspects of child development if stimulation, encouragement, and guidance are to be effective in child growth.

The fourth function of teacher education is development of powers of evaluation. Knowing subject-matter and child nature, and possessing a working philosophy of life, the teacher then faces the obligation of selection. What subject-matter will function now or later? How can it be organized most usefully? What methods will be most effective? When shall the child be introduced to particular subject-matter? To what extent shall repetition occur? How shall curriculum materials be coordinated and integrated? Curriculum construction and methods of teaching are not routine matters. They demand a deep and extensive education such as will develop powers of evaluation.

The fifth function of teacher education is training in professional ethics. This phase of education is based on ideals of conduct with respect to working relationships among members of the profession. To illustrate, rumor has it that a certain position will be vacant soon. What should the anxious and ambitious aspirant for that position do in this case? Unfortunately, home education, active participation in community affairs, or observation of professional workers on other fields does not always enable the prospective teacher to decide wisely in such a case. The responsibility of providing instruction of this kind lies in programs of teacher education. Just as there are ethical standards in other professions and ideals of conduct for the every-day world, there must be an ethical code for the profession of teaching. It must be founded on ideals, consciously formulated, and on habits of action grounded in reflection and practice.

The sixth function of teacher preparation is education for life outside the classroom. The five points mentioned above relate to the vocational interests of teachers. There are, however, many obligations that make their demands in the non-vocational or avocational life of teachers. Social life in the home, community problems, economic, political, and social questions that reach beyond neighborhood or local community boundaries, all of these call for wide information and a well-balanced sense of personal responsibility. Education for teaching that neglects these demands falls far short of the mark. Professional education and non-vocational education have mutual values primarily to the ends of one, and another group to the ends of the other. Furthermore, the teacher who establishes himself as a valuable member of society, apart from his profession, commands a degree of respect and confidence that inevitably wins lay support for organized education. His work as a teacher, therefore, becomes increasingly effective as he merits the badge of worthy community membership.

National Education Association (Department of Superintendence), *Ninth Yearbook* (1931), pp. 267-268.

402

The Teacher's Beatitudes

Blessed are you teachers: for you have found your work.

Blessed are you teachers: for you are freed from the temptation to put your trust in money.

Blessed are you teachers: for yours is the kingdom of children.

Blessed are you teachers: for your associates are among the world's best.

Blessed are you teachers: for your work is constantly realizing your selfhood.

Blessed are you teachers: for you may "allure to brighter worlds" of truth and live and "lead the way."

Blessed are you teachers: for you have kinship with the great sharing souls of all mankind.

Blessed indeed are you teachers: for you have an Elder Brother who is the Great Teacher, even of the whole world.

HORNE, HERMAN HARRELL, *The Essentials of Leadership* (Nashville, Cokesbury, 1931), p. 77.

403

R. H. Quick on Different Types of Masters

A great many things go to the making of a good master, but failing the absolutely good, one may get good men of their kind and the kind may differ very widely.

One type is the good driver. He gets a good bit of work out of his boys and is respected by them. He must too be feared by them, or he will not drive properly. Of course it is easy to point out that the highest kind of work cannot thus be forced. It is so no doubt, but a great deal of work can be forced, and the boys will be the better for it. A boy would naturally rather be reading novels or "bally-ragging" than learning repetition, though he may have no repugnance to the repetition. Then the consciousness that he will catch it if he "skews" directs his energies into the right direction. I wish

I were a better driver, but I am very weak in this line, and really can't get work done in this way.

Another type is the cramming master who asks boys the right things so often that they get to know them without any exercise of their own will. A boy doesn't care a button about strong and weak verbs, say. Well, I go on asking him about them, and making him conjugate strong verbs and weak till at last he can't help knowing them. If the crammer seizes on the right things he gets a certain amount into boys who would learn in no other way. In language teaching one is driven to cram in a certain amount in this way.

Next comes the man who can rouse his boys' emulation. This brings out much more of the boys' faculties and makes the work go with a will.

The highest kind of master is he who gets boys to work either because they like the master or like the work. One ought to make much more of personal influence. Boys will do anything for a man when an individual relationship has been set up between them. If the master wishes to get this influence he must make the boys feel that he looks at each boy as an individual and not merely as one of a class. Private talks with boys are very valuable in this way, especially when the master can find anything to praise. But conscious as I am of all this, and being as I am on the most friendly footing with the boys, I live in such a muddle that I don't seem to have time and attention to give to the individual boy.

Quick, R. H., *Life and Remains* (Storr, editor; New York, Macmillan, 1899), pp. 264-265.

404

Corporal Punishment Contrary to the Spirit of Liberty

While the influence of Pestalozzianism and a resulting milder discipline began to be felt in the United States through the educational service of Horace Mann, it must not be forgotten that Benjamin Rush argued strongly against corporal punishment and the prevailing methods of school discipline almost half a century before this time. Rush, to whom we have already referred, was a patriot who lived during the trying times of the American revolution, and what he wrote on education was written largely from the standpoint of democracy. In 1790 there came from his pen an essay on "Amusements and Punishments Proper for School."

Rush argues that the amusements of our youth at school should consist of such exercises as would be most subservient to their future employments in life. These employments are agriculture, mechanical occupations and the business of the learned professions. In agriculture, he suggests school gardens for amusement; in mechanical occupations, he suggests a form of manual training; in the business of the learned professions, to which he belonged, he recommends "the amusement derived from cultivating a spot of ground."

It should be noted here that the ideas expressed by Rush, on the above point, are as old as Plato. In the First Book of the "Laws" Plato says: "Children should learn beforehand the knowledge which they will afterwards require for their art. For example, the future carpenter should learn to measure or apply the line in play; and the future warrior should learn riding, or some other exercise for amusement, and the teacher should endeavor to direct the children's inclinations and pleasures, by the help of amusements, to their final aim in life."

Under the discussion of punishments which are proper for schools, Rush says, first, in a general way, that the spirit of making punishments less severe had its effect in civil, ecclesiastical, military and domestic society, but that this spirit of humanity and civilization had not yet found its way into the schools. "The schoolmaster," says he, "is the only despot known in free countries." "This," he continues, "is, perhaps, because the little subjects of his arbitrary power have not been in a condition to complain." "I shall endeavor, therefore," he adds, "to plead their cause, and to prove that corporal punishments, except to children under four or five, are never necessary and always hurtful in schools." Then he gives the following eleven reasons against corporal punishment:

1. School children feel the force of rational and moral obligation, and may, therefore, be deterred from committing offences by motives less disgraceful than the fear of corporal punishment.
2. By correcting children for ignorance and negligence in school, their ideas of improper and immoral actions are confounded.
3. Parental anger may sometimes produce violent effects upon a child—much more the teacher's anger in which there is no admixture of parental affection.
4. Injuries are sometimes done to the bodies, and sometimes to the intellects of children by corporal punishments.
5. Corporal punishments, inflicted at school, have a tendency to destroy the sense of shame, and thereby to destroy all moral sensibility.
6. Corporal punishments, inflicted at school, tend to beget a spirit of violence in boys toward each other, and hatred toward their masters.
7. Corporal punishments, inflicted at school, beget a hatred to instruction in young people. . . . They are some means by which the devil seeks to keep the world in ignorance.
8. Corporal punishments are not only hurtful, but unnecessary, in schools. . . . Some celebrated and successful schoolmasters get along without them.
9. Fear of corporal punishment debilitates the body and contracts the capacity of the mind for acquiring knowledge.
10. There is not the proper ratio between offence and punishment. Corporal punishments level all capacities and tempers.
11. Corporal punishments, inflicted in an arbitrary manner, are contrary to the spirit of liberty and should not be tolerated in a free government.

Rush says: "Had I influence enough in our legislature to obtain only a single law, it should be to make the punishment for striking a boy the same as assaulting and beating an adult member of society."

The following is the method which Rush suggests for governing a school: In the first place the teacher should acquire the confidence of his pupils by a prudent deportment. He should learn to command his passions and temper at all times in his school; should treat the name of God with reverence; should exact respectful behavior toward himself. He may join in the amusements of his pupils; and to secure their affection and respect more perfectly, he should give them prizes once or twice a year for proficiency in learning and for good behavior. If these things fail, then the following modes of punishment should be adopted:

1. Private admonition—like the Divine Being in the still small voice of conscience.
2. Confinement after school hours are ended; but with the knowledge of the parents.
3. Holding a small sign of disgrace of any kind, in the middle of the floor in the presence of the whole school.

If these punishments fail, the pupil should be dismissed from school so as to prevent him from corrupting his schoolmates. "It is the business of parents, and not of schoolmasters, to use the last means for eradicating vice and idleness from their children." The following sentences seem quite modern, though written, in our own country, one hundred and twenty years ago: "We should let the divine principle of love extend to the schools. Children are capable of loving in a high degree. They may, therefore, be governed by love."

KUEHNER, QUINCY A., *The Evolution of the Modern Concept of School Discipline* (Allentown, Weaber, 1913), pp. 42-45.

405

Teachers Are Preparing Fulfillment of Future Events

While other men arrogate wisdom and profess an ability to foresee and predict future events, the teachers, by their influence upon the children, are not uttering prediction, but preparing fulfilment, and predetermining of what nature the future events shall be;—for events will grow out of the conditions of the mind, and they are producing that conviction.

MANN, HORACE, *Life and Works* (Boston, Lee and Shepard, 1891), Vol. 5, p. 184.

406

Fluellen's Leek

Schoolmasters of the old school used to make a great point of giving boys work they did not like. They said it was good for boys to be made to apply themselves to unpleasant tasks: then they learnt masteries, &c.: it was an utter mistake on the part of the master to try to make things pleasant. In fact they commended the Latin Grammar to their pupils in much the same terms as Fluellen commends the leek to Pistol—"I peseech you heartily, scurvy, lousy knave, at my desires, and my requests, and my petitions, to eat, look you, this leek: because, look you, you do not love it, nor your affections, and your appetites, and your digestions, does not agree with it, I would desire you to eat it." This was practically their line, and they then betook themselves to Fluellen's forcible means of persuasion.

QUICK, R. H., *Life and Remains* (Storr, editor; New York, Macmillan, 1899), pp. 283-284.

407

Two Kinds of Bad Teachers

Unsuccessful teachers may be divided generally into those who have no clear conceptions in their own minds and those who, having clear conceptions in their own minds, take it for granted that the same clearness must exist in their pupils' minds, or at least may be brought about easily and quickly. When a first-class classic or a high wrangler is put to teach young and backward boys, he seldom gives his pupils anything that they really understand. He takes all elementary conceptions for granted. On the other hand, people of the usher and governess class have no notion what clear perception is, so they naturally do not cultivate it in their pupils. As it seems to me, we cannot be too careful to see whether we ourselves know exactly what we mean by the words we use, and whether our pupils know what we mean. The notion of the verb, the difference between a transitive and intransitive verb, and between active and passive voice does not get clear in most children's minds for years after they are supposed to be quite familiar with it.

QUICK, R. H., *Life and Remains* (Storr, editor; New York, Macmillan, 1899), p. 284.

408

The Teacher's Problem Twofold

The teacher's problem is thus twofold. On the one side, he needs to be a student of individual traits and habits; on the other side, he needs to be a student of the conditions that modify for better or worse the directions in which individual powers habitually express themselves. He needs to recognize that method covers not only what he intentionally devises and employs for the purpose of mental training, but also what he does without any conscious reference to it,—anything in the atmosphere and conduct of the school which reacts in any way upon the curiosity, the responsiveness, and the orderly activity of children. The teacher who is an intelligent student both of individual mental operations and of the effects of school conditions upon those operations, can largely be trusted to develop for himself methods of instruction in their narrower and more technical sense—those best adapted to achieve results in particular subjects, such as reading, geography, or algebra. In the hands of one who is not intelligently aware of individual capacities and of the influences unconsciously exerted upon them by the entire environment, even the best of technical methods are likely to get an immediate result only at the expense of deep-seated and persistent habits. We may group the conditioning influences of the school environment under three heads: (1) the mental attitudes and habits of the persons with whom the child is in contact; (2) the subject studies; (3) current educational aims and ideals.

DEWEY, JOHN, *How We Think* (Boston, Heath, 1910), p. 46.

409

Trained Teachers the Vital Need

If thoroughly equipped and trained teachers can be secured, all other needs incident to perfect products will follow. If the vital need is provided, all attendant conditions to right teaching will inevitably be secured. It seems manifestly foolish to waste time and energy upon subordinate matters when the dominant question is unsettled and even unnoted. The cry of childhood is for teachers, teachers, teachers; and we must not give a stone when childhood calls for bread. What does all the inanimate material of education amount to if it is not quickened into life and made an active thing by the spirit of a trained teacher!

BRUMBAUGH, MARTIN G., *The Making of a Teacher* (Philadelphia, Sunday School Times Company, 1905), p. xi; (New Edition, New York, Harper, 1932).

410

The Personality of the Teacher

In the hypothetical school consisting of Mark Hopkins and his pupil Garfield, or in the very real Drumtochty School under old Domsie, all these phases of technique coalesce in the personality of a great teacher. Unhappily, perhaps, society is long past that possibility. The school is organized and must be organized on the principle of division of labor, but there is all the difference in the world between the school which is a sort of pedantic factory and one which is in some degree an expansion of Mark Hopkins or of the old humanist. In the one, the pupil encounters a series of more or less erudite lesson-hearers, periodically is fed into some testing machine, and occasionally, if he is very good or very bad, has an interview with a person who is classified as an administrative officer. In the other, the whole pupil goes to school to every teacher, to his personnel officer, and to the principal of the school or his assistant. Each of the latter in a school which is at all well organized to secure true educational products is wholly teacher or, if you prefer, educator. True, this person may be using history and another mathematics and a third physics as media of education, while a fourth is studying the pupil quite apart from any course, and a fifth is occupied with arranging a pupil's schedule or interviewing a teacher or parent. Nevertheless, to the extent that they are all teachers, and teachers in the same sense of the word, the school succeeds or fails in its principal mission.

Morrison, Henry C., *The Practice of Teaching in the Secondary School* (Revised Edition; University of Chicago Press, 1932), pp. 579-580.

411

The Ideal Way—What, How, and Why

I do not say that we have pushed too far our requirements for book knowledge in teachers. It does not harm the teacher to know a little something of books. A little knowledge is not so very dangerous as some of us seem to think. But we have pushed our requirements too far in one direction. The land is full of one-sided teachers. A one-sided teacher never grows.

We demand that they shall know what and how to teach. The next and more important step, is that they shall know why they do thus. It is not the art of the old school, it is not the science of the new. It is art joined with science, it is culture derived from books; the skill of a trained mind knit to the gentle yet irresistible power of nature, which characterizes the best teaching. Some one says that Jefferson, the great actor, has entered so entirely into Rip Van Winkle, that as he walks the streets he is not quite sure that "mine dog Schneider" is not at his heels.

A change is coming over the whole aspect of the teacher's life. It is like the change which comes over the sky just before the dawn. Thring says: "Teaching is not possible if an inspector is coming to count the bricks made to order." But teaching is not possible if the teacher has no higher ambition than to make bricks to order. Children must be treated as children. It is nothing against a boy that he hates books, and loves fun. If he is wideawake and honest, his fun is perhaps the best part of him. Get hold of him on that side, and you will have control of him; confine your efforts to the book side, and you drive him out of school, or render his school useless.

I have great respect for the boy part of the boy. It is not always against him that he is attracted by remunerative work. The schoolmaster complains because the boy leaves school to drive a delivery wagon. Yet some one must drive the wagon, or the schoolmaster will have no dinner.

The point for the skillful teacher to reach is the personal consciousness, the inner sense of the child, not holding up to him a lofty ideal of some one, a something outside of himself, but endeavoring to make him that ideal to himself; to form within him that type of a perfect man which is the strength of manhood, the comfort of age, the surety of life everlasting.

Sabin, Henry, *Common Sense Didactics for Common School Teachers* (Chicago, Rand McNally, 1903), pp. 298-299.

412

The School a Living Agency

Emerson once wrote his daughter that he cared little concerning the name of the school she attended, but that he cared much concerning the teachers with whom she studied. He understood what we shall all have to understand, that the school is a living agency, a place where life touches life; and that teaching is the conscious act of the trained spirit of a teacher influencing the less trained spirit of the pupil, to the end that the pupil may come into possession of all the knowledge, culture, and training he is capable of receiving. The entire value of the teaching process is to be found in the power of the teacher to enrich the soul of the learner.

Brumbaugh, Martin G., *The Making of a Teacher* (Philadelphia, Sunday School Times Company, 1905), pp. 3-4; (New Edition, New York, Harper, 1932).

413

Teachers Should Recognize Individual Capacities and Aptitudes

In Spectator, No. 20, is found an article on "Flogging in the Public Schools," written by Sir Richard Steele, the man who with Addison commenced the publication of "The Spectator" in 1711. In this article Steele strongly opposes the harsh methods of discipline prevailing in the English Schools of his day, and declares that this mode of discipline was in vogue only because schoolmasters failed to observe the natures and capacities of the pupils in their charge. Considering the period when it was written this article is remarkable. The following quotations will be sufficient to show the spirit of the writer. The article opens as follows:

"I must confess I have very often, with much sorrow, bewailed the misfortune of the children of Great Britain, when I consider the ignorance and undiscerning of the generality of schoolmasters. The boasted liberty we talk of is but a mean reward for the long servitude, the many heartaches and terrors, to which our childhood is exposed in going through a Grammar School. Many of these stupid tyrants exercise their cruelty without any manner of distinction of the capacities of children, or the intention of parents in their behalf. There are many excellent tempers which are worthy to be nourished and cultivated with all possible diligence and care, that were never designed to be acquainted with Aristotle, Tully or Vergil; and there are as many who have capacities for understanding every word those great persons have writ, and yet were not born to have any relish of their writings."

Steele ends the article by saying: "Let the child's capacity be forthwith examined, and he sent to some mechanic way of life, without respect to his birth, if nature designed him for nothing higher; let him go before he has innocently suffered and is debased into a dereliction of mind, for being what it is no disgrace to be—a plain man. I would not here be supposed to have said that our learned men of either robe, who have been whipped at school, are not still men of noble and liberal minds; but I am sure that they would have been much more so, had they never suffered that Infamy."

KUEHNER, QUINCY A., *The Evolution of the Modern Concept of School Discipline* (Allentown, Weaber, 1913), p. 26.

414

The Teacher and the School

The value of every school depends primarily upon the teacher. With palatial buildings and magnificent equipment no community has an effective school if the teachers are of indifferent ability. On the other hand, superior, if not the best work is possible in spite of inadequate physical conditions and meager supply of every teaching accessory if only the teacher is the right person. While the fact has been emphasized throughout that the character the child furnishes determines the product of education more than anything the school itself can do, such is the power of personal influence that pupils daily become what their teachers are. The teacher who is nervous, nagging, stupid, obstinate, or superficial, invites discord and reflects his objectional qualities by mere presence; one who is normal, vigorous, alert, sympathetic, or thorough carries the spirit of energy and cooperation.

DAVIS, SHELDON E., *The Work of the Teacher* (New York, Macmillan, 1918), p. 309.

415

Assisting the Learner

We teach when we assist the learner to get control of some worthy value. This learner is interested in doing things. When he comes to a point where he needs assistance and asks for it, we teach him. But, in order to help him, we must know what he is doing, what terminology he uses, and what his attitudes and biases are. In other words, the teacher must not only know how to do things, but in addition must know the content of the experience of the one taught.

CHARTERS, W. W., *Methods of Teaching* (Chicago, Row, 1912), p. 119.

416

The Teacher Must Help the Pupil to Discover Himself

There is no doubt that there are thousands of children in our schools today who, if they come into real living contact with an inspiring, sympathetic, capable teacher, will be a power to influence their fellow men. But without such contact and inspiration their powers will lie dormant, the favorable time for learning will pass, their brains will become less plastic, and they will be doomed to live on a low intellectual plane, all the time conscious that life might have been so different. The teacher must help the pupil to discover himself. Otherwise the pupil may repeat in his own life the tragedy described in Gray's "Elegy."

Colgrove, Chauncey P., *The Teacher and the School* (New York, Scribner, 1910), p. 67.

417

An Important Aim of the Teacher

There is one other aim which the teacher should have constantly in mind, i. e., that children should be taught how to work independently. The best teacher is one who is constantly striving to render her services unnecessary. There is nothing that the school can do which will take the place of giving the child knowledge of the most economical means to be employed in achieving desirable ends. Is it a matter of knowledge, the child should be made conscious of the methods whereby truth may be established; is it the need of establishing a new habit, or the breaking up of the old one, we should make available for the pupil the principles of habit formation so that he may apply them to his own case; in matters of right or wrong, the school should have supplied standards of reference which will help in the difficult situation. Possibly the great weakness of many teachers in imparting this knowledge of methods of work is best illustrated by citing the well-known fact that children of high school or even college age, are found very frequently who do not know how to read a book, or study a lesson assigned.

Strayer, George Drayton, *A Brief Course in the Teaching Process* (New York, Macmillan, 1913), pp. 9-10.

418

The Teacher's Sole Business

The Teacher is the one and only member of society whose sole business it is, by set plan and purpose, to develop the whole life of another. He can help the pupil to know himself, to get a larger vision of life, to covet earnestly the best gifts, to aspire to the things that are true, honest, just, pure, lovely, and of good report. These are the ultimate aims of the school.

Colgrove, Chauncey P., *The Teacher and the School* (New York, Scribner, 1910), p. 114.

419

The Schoolmaster a Moral Teacher or Disciplinarian

The schoolmaster, in common with all persons exercising control for a particular purpose, is a moral teacher or disciplinarian; contributing his part to impress good and evil consequences in connection with conduct. For his own ends, he has to regulate the actions of his pupils, to approve and disapprove of what they do as social beings related to one another and to himself. He endorses and cultivates obedience, punctuality, truthfulness, fair dealing, courteous and considerate behavior, and whatever else belongs to the working of the school. Whoever is able to maintain the order and discipline necessary to merely intellectual or knowledge teaching, will leave upon the minds of his pupils genuine moral impressions, without even proposing that as an end. If the teacher has the consummation of tact that makes the pupils to any degree in love with the work, so as to make them submit with cheerful and willing minds to all the needful restraints, and to render them on the whole well-disposed to himself and to each other, he is a moral instructor of a high order, whether he means it or not.

BAIN, ALEXANDER, *Education as a Science* (New York, Appleton, 1908), pp. 401-402.

420

Need of Poise, Self-Control, and Patience

As fashioners of the future America, we must rise above the American standard of haste, bustle, and speed. Our teaching and the spiritual atmosphere of our classrooms too easily reflect the prevailing standards of American life. The school exists not so much to conform itself to existing society as to transform existing society through its future members into what it ought to be. In the classroom those standards of poise, self-control, equilibrium, and patience should prevail in relation to which young souls may properly grow, and which are so conspicuously lacking from American society. Things of beauty are neither created nor enjoyed in record-breaking time, but the spirit of leisure and free spontaneity characterizes them. This does not mean that we are to be inactive when we should be at work, but it means that the spirit of self-control should animate even our busiest days.

HORNE, HERMAN HARRELL, *The Teacher as Artist* (Boston, Houghton Mifflin, 1917), pp. 56-57.

421

Keep in Touch with Humanity

O Teacher, find your inspiration in your work! Find work that will keep you mentally fresh. You, above all, have need of work that will make you grow, and what you do for the sake of the children is the only work that gives you life. With neighbours, fathers, mothers, with children, good and bad, you must cast your lot and as a leader plan the future of the race. Do not go to books. There is more philosophy—big, broad, human philosophy—in the simple folk lore of some of the poorest and most distressed people than there is in most of the books that you read. It is only when you keep in constant touch with humanity that you see the child, more important than the curriculum, than the school, than the per cents, than promotions.

To know the child, to work so that he may grow, is a far bigger thing than anything else in the world. You sometimes refuse to have anything to do with the child that presents a problem. You cast him off, because you are school-trained, not life-trained. You put the problem up to somebody else. When you do that you are lost. This is your problem. Only touch with life conditions can help solve it.

PATRI, ANGELO, *A Schoolmaster of the Great City* (New York, Macmillan, 1922), pp. 206-207.

422

Sympathy the Crowning Qualification of a Teacher

It need hardly be said here that the one crowning qualification of a perfect teacher is sympathy—sympathy with young children, with their wants and their ways; and that without this all other qualifications fail to achieve the highest results. The true teacher ought to be drawn towards the profession by natural inclination, by a conviction of personal fitness, and by a wish to dedicate himself and the best powers and faculties he has to this particular form of service. That conviction, if it once dominates the mind of a person in any walk of life, does much to ennoble and beautify even work which would otherwise be distasteful; but I know no one calling in which the presence of that conviction is more necessary, or its absence more disheartening, than that of a schoolmaster. Teaching is the noblest of all professions, but it is the sorriest of trades; and nobody can hope to succeed in it who does not throw his whole heart into it, and who does not find a positive pleasure as he watches the quickened attention and heightened color of a little child as he finds a new truth dawning upon him, or as some latent power is called forth. There is no calling more delightful to those who like it; none which seems such poor drudgery to those who enter upon it reluctantly or merely as a means of getting a living. He who takes his work as a dose is likely to find it nauseous. "The good schoolmaster," says Fuller, "minces his precepts for children to swallow, hanging clogs on the nimbleness of his own soul, that his scholars may go along with him." This means that he has enough of imaginative sympathy to project his own mind, so to speak, into that of his pupil, to understand what is going on there, and to think not only of how his lesson is being imparted, but also of how it is being received. But nobody can do this who is not fond of his work. That which we know and care about we may soon learn to impart; that which we know and do not care about we soon cease to know at all, to any practical purpose.

Fitch, Sir Joshua G., *Lectures on Teaching* (New York, Macmillan, 1885), pp. 35-36.

423

The Spirit of the Teacher

As pointed out by Benjamin Rush, Alexander Bain and some other thinkers, whom we have mentioned, the success of the teacher, both in imparting knowledge and as a disciplinarian—for the two go hand in hand—depends largely upon his personality and upon the spirit with which he is imbued. The teacher who, like Thomas Arnold, feels that education means something to those under his charge, who is convinced that mental cultivation is a sacred duty, will naturally assume an attitude toward his work which goes a long way toward making him respected by his pupils. If, with this spirit, he remembers Bain's observation that clearness of explanations is absolutely essential, and develops skill in realizing this latter point, his problems of discipline will be still further solved. Or he may be a Herbartian and proceed according to the theory of apperception and interest; nevertheless he needs some of the spirit of Arnold, or, probably better still, of Pestalozzi, of Mann, of Owen, the spirit which sees in the child a lovable soul, and in education the welfare and happiness of the race.

KUEHNER, QUINCY A., *The Evolution of the Modern Concept of School Discipline* (Allentown, Weaber, 1913), p. 61.

424

The Task of the Teacher

The task of the teacher involves at least four elements, viz., first, so to instruct and to occupy as to develop his pupils. Information is communicated, gathered, or elicited from pupils' minds in a way to realize power, and occupations are provided in a way both to arouse and to satisfy interest, and to attain skill. The teacher, whether by sensory or motor material, is the developer.

Second, it is the task of the teacher to be the medium of communication between the pupils' mind and the subject-matter. Without him it is dead stuff to them. He knows both them and it. From it he selects those things they can bear and them he gradually widens to cover it. Without him, they are self-taught, and so poorly taught; with him, their growth is consecutive and the subject appears in its intrinsic and extrinsic articulation. The teacher, between impersonal truth and personal life, is the mediator.

Third, it is the task of the teacher to interpret life to his pupils. Living is the great art. In its keeping are the keys of destiny. Through inexperience the art of living well is difficult to pupils. Through his wider experience and observation the teacher is, or ought to be, comparatively a master of the art of living. To him are known the shallows and the rocks and also the great safe deep, with the harbor beyond. While his pupils are with him, he is their advisory, not compulsory, pilot; from him they learn the art of steering well the vessel of life. It is a vessel always freighted with merchandise precious to others. Figures aside, the teacher, by his daily walk and conversation, throws in true perspective the good and bad of life, translates into the language of immaturity life's great words of truth, is the interpreter of life.

Fourth, as if what has preceded were not enough, as if to him that hath shall be given and he shall have abundantly, it is the task of the teacher to perfect mind,—the last instrument selected in evolutionary progress. Evolution is now proceeding along mental instead of physical lines. Mental competition has taken the place of the old physical struggle for survival. The last innings are those of the spirit; upon the treatment of the spirit in this epoch of the world's change depends the next destiny of the human race. Long before the time allotted by the astronomers for our planet to become a dead frozen ball humanity will have decided whether the gift of the spirit is too much for it or no. The content of historic time and a profound philosophy unite in an optimistic outlook,—spirit will preserve itself, man will become yet greater. The whole weight of the teacher's influence is cast for the individual and social preservation of the spirit; he brings souls into their kingdom. He is the prophet and priest of progress.

Because of the greatness of his task, let the teacher magnify his office. But lest he magnify it unduly and the vice of pride supplant the virtue of humility, let him remember his fellow-servants, the parent, the statesman, the minister, and also that to no one nor all of these does this world and its future belong, nor are their tasks self-appointed.

HORNE, HERMAN HARRELL, *The Psychological Principles of Education* (New York, Macmillan, 1915), pp. 39-41.

425

Teaching Should End in Noble Living

Jesus was a teacher of human souls, not of human intellects. The great teachers of Greece rested their discourses upon an appeal to the intellect. Their great orations conclude with an appeal to reason—it is the summing up in logical order of the principles announced in the discourse. The hearer was led to know. There is a reason for this. Greek philosophy as formulated by Socrates assumed that if one knew the right he would surely do it. We have abundant proof of the inadequacy of this teaching. The great teachers of Rome rested their discourses upon an appeal to the sensibilities. Their great orations conclude with an appeal to the feelings—it is the sweep of a lofty sentiment to a climax that swayed the auditors as the summer winds move the ripening grain. Many of our American orators have followed these Roman models.

But the greatest teacher of all, Jesus of Nazareth, directed his appeal to the will. He was too wise to be content with intellectual products as were the Greeks, or with emotional products as were the Romans. He understood that the soul is cultured only when the will is moved to act. Notice how he concludes that most wonderful of all addresses, the Sermon on the Mount: "Every one therefore that heareth these words of mine, and doeth them, shall be likened unto a wise man:" and, again: "And every one that heareth these words of mine, and doeth them not, shall be likened unto a foolish man." Note that the difference is not in the understanding, but in the doing, of the truths he uttered. Both heard. The foolish man did not act. The wise man acted. We want teaching like this, teaching that appeals to the will, teaching that ends in noble living.

BRUMBAUGH, MARTIN G., *The Making of a Teacher* (Philadelphia, Sunday School Times Company, 1905), pp. 5-6; (New Edition, New York, Harper, 1932).

CHAPTER XVIII

Educational Organization, Administration, and Support

THE material in this chapter deals with the philosophy underlying educational organization, administration, and support. The selection from Arnold Tompkins on the fundamental law of the school (426) shows that everything exists in idea before it can exist in objective reality, and that the idea, school, conditions all the organic factors of the external organization, including even the school law. The student should read and analyze this selection carefully.

No doubt, as G. Stanley Hall suggests (427), the time is in need of a great educational leader and of educational statesmen with vision and faith. The essential nature of the problem of school support is explained by Cubberley (428). To remind the student of a great educational statesman and his method of awakening the people of his time, the author has included Horace Mann's inimitable statement on Schoolhouses (435). Other selections in the chapter to which special attention is called are 436, 438, 439, 440, and 442.

426

The Fundamental Law of the School

The fundamental law of the school is implied in the statement that "the school is an organic spiritual unity." It is not merely the co-operation of objective and apparently fixed factors, but a movement of life through external forms back to life again. The law is not to be found in the material, obtrusive, objective, and stationary factors in the process; but within the inner life which moves the organism to the realization of its purpose,—in the spirit which makes alive to its work the apparent organism, but not in the apparent organism.

Everything exists in idea, in life and thought, before it can exist in objective reality; and the function of such objective thing is to realize the idea which created it. Such is the circle of its life and the law of its being. The idea rapid transit brought forth the railroad, and the railroad in turn must bring forth rapid transit. The railroad must relieve the pressure of life which creates it; but this pressure is a constant force, and the railroad is being perpetually created and held to the work of relieving the pressure. The idea by which it is realized must in turn be realized by it. Hence the railroad is not a fixed, dead, objective something, but a constant going out and returning to life; it is life. The objective thing cut loose from the life process is not a railroad; it vanishes into nothing when cut from its spiritual moorings. A railroad is not merely the external organization of material parts, but a circle of life, which is its reality and its law.

The idea of developing the child by a systematic teaching process brings forth the objective school; and this in turn must bring forth the development of the child. The objective school must answer back to the life which supports it. It stands as the middle term in a series,—between an idea and its realization; but it takes the whole series to constitute the school. The objective, fixed, something called the school is only a phase in the process, and is nothing apart from that process. It exists in and through realizing the idea by which it itself is realized. The real school is the whole process, not merely the objective phase of it; it is the constant outgoing of life through an external mediating agency back to life. This circle, again, and not merely the external organization of fixed parts, is its reality and its law.

And this school process is still more complex. The idea which originates the school has two phases,—one that of a felt need for something to remove the limitations of life, and the other that of instruction as a means of removing the limitations. The idea originating the external organization purposes the freedom of the individual through instruction. These are the elements of the school in idea; neither can be omitted, nor can they arise in any other order. Instruction cannot be conceived without the idea of an end to be realized; and the idea of an external school cannot arise except under the thought of instruction. Each may exist in thought without the succeeding, but not without the preceding; which shows that the subjective school is a movement in the direction named,—purpose, instruction, external organization.

The foregoing elements of the school in idea reverse themselves in the process of realization; for then the external organization comes first, after which instruction is given, and then the purpose is realized. Neither can this order be reversed. The purpose cannot be realized without instruction, and the instruction cannot be given without organized means to that end. And these three phases of school can exist only on the foregoing three as a basis. Besides, they must exist in the reverse order,—are logically conditioned in that order. The first in idea is last in objective reality. An idea always reverses the order of its elements in the process of becoming external; the beginning becomes the end; "the first shall be last, and the last shall be first," as appears in the following diagram of the school process:

THE SCHOOL PROCESS	THE IDEA SCHOOL	1. Purpose, or Need. 2. Instruction. 3. Organization—Management.
	becoming	
	THE REAL SCHOOL	1. Organization—Management. 2. Instruction. 3. Purpose, or Need, Realized.

Thus the objective school organization, both as idea and as objective reality, is the hinging-point on which the ideas, purpose, and instruction fold back upon themselves as actualized instruction and purpose. The ideal purpose and method of instruction form the subject-matter in "The Philosophy of Teaching." The hinging-point, through which purpose and instruction are turned back realized, is the subject-matter for

"School Management"; and the fundamental law of school management is disclosed in the fact that the subject to be treated is a hinging-point in the school process, and not a thing in and of itself.

Thus we are brought to the fact of supreme practical importance: namely, that the fundamental law controlling the school as an external organization cannot be dictated by that organization, but has its origin in the process taken as a whole. While the law must arise from within, as shown at the outset, yet the law does not get its authority from any part, but from the school as a whole, taken in its entire circle of activity. The part, such as the external organization, with which management has to do, receives its law from the whole. The law of the school is its informing life, its inherent nature, which finds expression in the objective something with which school management has to deal. All the organic factors of the external organization, including the school law itself, must be tested by an idea which is antecedent to, and which logically conditions, the external and objective school.

The external organization, instead of dictating the law, may even be in opposition to the law. Even the statute embodying school law may be antagonistic to the law of the school. School directors, under a false sense of economy, sometimes lower the tax levy and shorten the school term. This is done by permission of the school law but in opposition to the law of the school. In faithful execution of the school law, it may be necessary to crowd sixty pupils into the care of one teacher; but the idea which creates the school has not its freedom under such conditions. Under substantially the same conditions different States have different laws regulating the supply of books to pupils. These laws cannot all be best; and in so declaring we recognize something inherent in the school by which the school law itself is to be tested. Without such recognition school questions could not be argued. While never agreeing as to what is best in school organization and law, we do tacitly agree always that there is a best, if we could but discover it, and that this best is determined by something inherent in the nature of the school underlying external organization.

It thus appears that the established order is not the ethical order. The fugitive slave law is rendered null and void by the inner law. History is a record of conflicts between the ideal and inner truth of things, and external forms which were fixed by custom and law. There is a perennial strife between those who are loyal to forms as against the idea, and those who are loyal to the idea as against the form. There are those who seem to think that the external condition of things is the law, and therefore unassailable. Especially prone to hold this view are those who are a part of the fixed system. It seems to be the order, when a school system becomes fixed and crystallized, for those who form a part of the system to plead the fixed order as the ethical order, and to brand as iconoclasts or anarchists those who hold that the idea must not be violated.

Tompkins, Arnold, *The Philosophy of School Management* (Boston, Ginn, 1903), pp. 3-8.

427

The Time Is in Need of Educational Statesmen

Most educators are like Bunyan's man with the Muckrake who did not see the golden crown just above his head. Many of them are absorbed with petty details, for educational red tape and bureaucracy have grown enormously under progressive centralization. But there are better things—new tests of individual intelligence, new standards for the three R's, grading and marking, surveys by professional accountants and other experts, better modes of visualizing annual reports, project systems, examinations of pupils and of teachers, more vocational training, better teaching of dullards, defectives, and now of superior children; better school buildings and equipments, the progressive training of teachers while exercising their vocation, the education and prevention of criminal tendencies in the young, and best of all, better physical training and more effective instruction in personal and public hygiene. No one can disparage and all must praise each and all of these and other agencies of improvement which altogether mark general and steady if not signal progress. But above and beyond them all there are larger problems now confronting post-bellum pedagogy which call for far greater breadth of view, more originality in devising and boldness in carrying out yet more radical reforms. The time is cryingly in need of a great leader and of educational statesmen with visions and with faith in them who shall look over all the manifold factors of our present-day civilization from the standpoint of the nature and needs of the rising generation in their stage of apprenticeship to life as broadly as Plato did in his ideal republic, which we know was conceived to save a state smitten with the seeds of decay, just as the great scheme of Comenius was to regenerate Europe after the Thirty Years' War; or Rousseau, who now seems to us, though he did not realize it, to have been striving to anticipate and save France from the impending revolution. Unless the present extremity can produce such a man, not only shall we fail to realize the unique possibilities of the present era of opportunity but our very institutions themselves will suffer slow but sure decline, for never so much as now is education the one and chief hope of the world.

HALL, G. STANLEY, *Life and Confessions of a Psychologist* (New York, Appleton, 1923), pp. 520-521.

428

Essential Nature of the Problem of School Support

Yet in all these communities people live, children are born and need schooling, and young people need to be trained to become intelligent future citizens of State and Nation. The same industrial revolution that developed the inequalities just described has also brought new political and social needs that make education a greater State and national interest than ever before in our history. These changes have been so far-reaching that the State has been forced to assume a control over education undreamed of in the earlier period of our national life. The scope of public education has been widened and the per capita costs increased, and will continue to widen and increase; far better educational advantages than today are provided are needed by millions of children; the State's demands as to compulsory education, length of term, type of teacher, sanitary conditions, and scope of education provided are often as yet but poorly met, and are not likely to be lessened; child-welfare work has really only begun; and better training of our teachers and better supervision of their work are urgently needed everywhere outside our cities.

The general result of these new demands in education has been that the burden of school support, with local taxation and the old property tax as the chief reliance, is today greater than many communities can meet. With the maximum tax allowed by law they cannot comply with the minimum demands of the State, low as these demands often are. The taxes today levied on farm property often are almost confiscatory in character, yet the education provided for rural and village children is usually far inferior to what it ought to be. Unless there can be a greater pooling of costs for what is so manifestly for the common good, there can be but little hope for better educational advantages for the children who live in the poorer villages and poorer farming sections of the United States.

The problem calls for a consideration, too, as to the essential nature of education itself. If education is only or largely a personal or a local benefit, such as telephone service, street lighting, sidewalks, or streets, then education should be provided for by local taxation. Having been conceived, though, as essential to the welfare of the State as a whole—one well may say the Nation as a whole—its maintenance then should be by the general taxation of all. Education is a necessary State service to which all owners of property—all citizens with an income, regardless of the possession of tangible property—must be subject. Nor can any man be excused from contributing his share of support because he chooses to send his children to a private or a parochial school. This we have left him free to do, but the exercise of such freedom and choice cannot be expected to relieve him from contributing his proper share to the support of so essential a State service as public education.

The remedy for existing difficulties lies in larger administrative and taxing units and in different types of taxation. The costs for anything so vital to the public welfare must be better equalized than is at present the case. This calls primarily for tax reform, the county unit in taxation for education as for other public needs, and for a much larger proportion of State support than now prevails in most States.

CUBBERLEY, ELLWOOD P., *An Introduction to the Study of Education and to Teaching* (Boston, Houghton Mifflin, 1925), pp. 421-423.

429

Authority Comes from the State

In all of this development, however, it should be noted that the authority and power to develop have come from the State, and not, except secondarily, from the community. This is an important point to be kept in mind. The school district, the township, the village, the city, and the county are all subordinate creations of the State, erected for the purpose of better local administration. The State creates these subdivisions of itself and then endows them with their powers, and these it may add to or subtract from, within the limits set by the constitution of the State, and as the best interests of the State may seem to require. It has been the people as a whole, represented in the legislature of the State, and not portions of the people here and there, who have been supreme in the matter of educational legislation. Such has been the policy of practically every State, and such a policy has the support of practically all of the administrative experience relating to public instruction which we have accumulated since we began to adopt education as a proper function of the State.

CUBBERLEY, ELLWOOD P., *Public School Administration* (Boston, Houghton Mifflin, 1922), p. 14.

430

One Task of an Administrator

If the transfer effect or disciplinary value of a subject is as small as it has been proved to be, then curricula for schools will have to receive their sanction on other than disciplinary grounds. No longer shall we be able to introduce Latin, or mathematics, or science into the course of studies and defend our actions on disciplinary grounds. As a matter of fact, the great interest in curriculum study found on the North American continent was stimulated by the experiments on transfer. If transfer proves to be a broken reed, then studies whose content is socially useful must be emphasized. Hence the purging of courses of study of elements which were palpably unpractical and unsuited to present-day civilization. Hence the job analyses, whose object was to determine the frequency of use in life situations of certain skills and forms of knowledge. If cube root is not used by one in a million once in a lifetime, it must be cast out of the course in arithmetic and something more useful substituted for it. This movement, which is leading to valuable improvements in curricula, may, however, go too far. Greek cannot be defended as a universal study on disciplinary grounds, but Greek culture has played such an important part in the history of mankind, that a few choice spirits should certainly be encouraged to study the language. A distinction should, therefore, be drawn between the common minimum which all should acquire, and the variations which can be superimposed on this minimum. Life is varied, and our schools, which are a part of this varied life, should reflect its richnesses. Not only do we require different types of schools, but also a variety of studies within these schools. Over-narrowness in types of school and subjects of study must be sedulously avoided. The preservation of nice balance between minimum essentials and the variety which adds spice to life is the task of the administrator.

Sandiford, Peter, *Educational Psychology* (New York, Longmans, 1932), pp. 298-299.

431

School Records

School records should not be confined to the marks given by the teachers to show the advancement of the pupils in their study of subjects, but should also include both objective and subjective reports on those physical, mental, moral and social characteristics which affect both school and adult life, and which can be influenced by the school and the home. Such records should be used as a guide for the treatment of each pupil, and should also serve to focus the attention of the teacher on the all-important work of development rather than on simply teaching subject matter.

From *Progressive Education* (Vol. 1, April 1924, p. 2).

432

Administration in Relation to Individual Differences

Among the administrative measures which are carried out on a city-wide basis to facilitate the differentiation of content and method for bright and dull pupils, the most fundamental is the classification of pupils according to ability range as indicated by mental, chronological and achievement ages, and tests and aptitudes as indirectly indicated by elections; second is the administrative machinery for listing and purchasing materials which aid differentiation in content and method; third, is the adaptation of courses of study to provide enrichment for the bright and simplified content for the dull; and fourth, such other administrative measures as diagnostic testing and remedial instruction, acceleration and slower than normal progress, preventive classes, and trial promotions which save a large percentage of failure among the average and dull groups.

National Education Association (Department of Supertendence), *Ninth Yearbook* (1931), p. 115.

433

A System of Schools an Organism

In a sense, a system of schools may be regarded as an organism created to produce certain changes in people. The fingers and hands are the teachers; the nerves, the supervisory force; the brain, the central administration. . . .

In order that the system may be effective, therefore, it is necessary that there be at the center some agency which, in careful and detailed fashion, shall determine the purpose of the process. . . .

The content, arrangement, and order of the curriculum should be worked out, and the materials of instruction necessary to the process should be developed and provided. Then the methods should be determined by which the curriculum may be best presented to and mastered by the pupils. How to make this a part of the teacher's work; how to see that the best results are secured, either by standardizing the product or watching the process; how to group pupils for most effective work; how to advance them from stage to stage; how to select, train and promote teachers; how to train character; how to form good habits; how to give culture; how to instill good manners and breeding; how to govern schools most effectively; how to keep records and make such reports as may be needed; how to keep children healthy and how to make schools so hygienic as not to impede progress; how to construct proper buildings and secure such equipment that the educational process may be best carried out; these are some of the problems of the brain of the organism. . . .

Christian Education in China (Foreign Missions Conference, 1922), pp. 135-138.

434

School Management the Work of Experts

The management of the schools should be left entirely to the judgment of the most intelligent experts. All culture begins with the individual and thence extends itself. The gradual approach of human nature to its true end is possible only through the efforts of liberally inclined propagandists who take an interest in the world's welfare and who are capable of conceiving the idea of a future improved state.

Buchner, Edward F., *Kant's Educational Theory* (Philadelphia, Lippincott, 1904), p. 120.

435

Mann on Schoolhouses

Schoolhouses are a fair index or exponent of our interest in Public Education. Suppose, at this moment, some potent enchanter, by the waving of his magic wand, should take up all the twenty-eight hundred schoolhouses of Massachusetts, with all the triangular and nondescript spots of earth whereon and wherein they have been squeezed,—whether sand-bank, morass, bleak knoll, or torrid plain,—and, whirling them through the affrighted air, should set them all down, visibly, round about us, in this place; and then should take us up into some watch tower or observatory, where, at one view, we could behold the whole as they were encamped round about,—each one true to the point of compass which marked its nativity, each one retaining its own color or no-color, each one standing on its own heath, hillock, or fen;—I ask, my friends, if, in this new spectacle under the sun, with its motley hues of red, gray, and doubtful, with its windows sprinkled with patterns taken from Joseph's many-colored coat, with its broken chimneys, with its shingles and clapboards flapping and clattering in the wind, as if giving public notice that they were about to depart,—I ask if, in this indescribable and unnamable group of architecture, we should not see the true image, reflection, and embodiment of our own love, attachment, and regard for Public Schools and Public Education, as in a mirror face to face? But, however neglected, forgotten, forlorn, these edifices may be, yet within their walls is contained the young and blooming creation of God. In them are our hope, the hopes of the earth. There are gathered together what posterity shall look back upon, as we now look back upon heroes and sages and martyrs and apostles; or as we look back upon bandits and inquisitors and sybarites. Our dearest treasures do not consist in lands and tenements, in railroads and banks, in warehouses or in ships upon every sea; they are within those doors, beneath those humble roofs; and is it not our solemn duty to hold every other earthly interest subordinate to their welfare?

Mann, Horace, *Life and Works* (Boston, Lee and Shepard, 1891), Vol. 2, p. 278.

436

Teachers Should Have a Voice in School Organization

If there is a single public-school system in the United States where there is official and constitutional provision made for submitting questions of methods of discipline and teaching, and the questions of the curriculum, text-books, etc., to the discussion and decision of those actually engaged in the work of teaching, that fact has escaped my notice. Indeed, the opposite situation is so common that it seems, as a rule, to be absolutely taken for granted as the normal and final condition of affairs. The number of persons to whom any other course has occurred as desirable, or even possible—say nothing of necessary—is apparently very limited. But until the public-school system is organized in such a way that every teacher has some regular and representative way in which he or she can register judgment upon matters of educational importance, with the assurance that this judgment will somehow affect the school system, the assertion that the present system is not, from the internal standpoint, democratic seems to be justified. Either we come here upon some fixed and inherent limitation of the democratic principle, or else we find in this fact an obvious discrepancy between the conduct of the school and the conduct of social life—a discrepancy so great as to demand immediate and persistent effort at reform.

Dewey, John, in *The Elementary School Teacher* (Chicago, University of Chicago Press, 1903), pp. 194-195.

437

Good Administration

Good administration involves unity of executive functions. Two persons cannot drive the same team of horses at the same time and drive it well. A school is a unity in which the teachers have various functions to perform and in which they look for guidance and assistance to the supervisors who come from the superintendent's office. This situation does not involve independent entities within the school; all the units are parts of one body, of which the principal, representing the superintendent, is the head. Any attempt on the part of the supervisor to impose his personality and his authority between the principal and the members of his department is destructive of good organization and of good administration.

Barr, Arvil S., and Burton, William H., *The Supervision of Instruction* (New York, Appleton, 1926), p. 49.

438

Basis and Limitations of Supervision

Public opinion is both the basis and limitation of supervision. The director, appointing the superintendent by the approval of a board who represent the people, is the immediate connecting link between the school and public sentiment. But when appointed, the superintendent shares the mediating function between the school in its concrete reality and public opinion. These special executive agents serve under the legislative action, which emanates from society as a whole. While insisting that executive function must be centralized in a single officer, it is also recognized that a widespread and intelligent school sentiment, from which may come wise school legislation, is, after all, the real basis of the school. The more people who take an active interest in school the better. Diffusion of educational sentiment is as necessary as definite location of executive function. Wide diversity of intelligent conviction, focused in unity of action, is the only means to certain, permanent, and valuable results.

The executive officers, being limited by the conditions imposed by the public, cannot be held responsible beyond the limits of opportunity furnished. Aside from lack of general encouragement and recognition of worthy service, the limitations are of two specific kinds. Society may fail to supply a sufficient number of competent teachers, and thus force the superintendent to choose inferior ones; or fail to supply funds sufficient to secure the best talent when found, or to furnish the proper conditions for effective service. The superintendent is doubly limited over the business agent; for he cannot find so easily what he wants, or secure it when found. Besides, it is much easier, it seems, to secure funds to supply the material conditions of the school than to secure the best professional service. The former is more tangible and conspicuous. A teacher is supposed to be a teacher, and that is the end of the matter. The distinctions in finer qualities, which are vital to the pupil, are not patent to the public gaze, or discernible by the unskilled eye. The old wooden school-house can easily be replaced with a brick structure, with turret and bell; while the wooden teacher remains undisturbed. Public sentiment must be educated, if not into a clear discernment of professional qualifications, into a faith that there is all the difference in the world between a scientific teacher working under proper conditions and just anybody teaching under any conditions. Schools are not good just in proportion to the money expended on them,—not at all; but the wisest supervision cannot make a good school without ample provision of funds, nor unless society furnishes a sufficient number of well-trained teachers. Public sentiment must be so quickened that it will not tolerate poor schools, and at the same time be made to feel responsible for the conditions which may produce good ones. The school cannot progress out of touch with the life that supports it. Ultimately, what is good in the school must be accredited to society; and there, too, must rest the blame for its shortcomings.

TOMPKINS, ARNOLD, *Philosophy of School Management* (Boston, Ginn, 1903), pp. 99-101.

439

The School Administrator and Outside Social Agencies

The duties of an administrator are by no means limited to the internal relations of the school. They put him as well into communication with outside social, economic, and civic agencies.

This follows inevitably, since the trend of modern education has been to adapt practice to an organic theory of learning. Courses of study in the so-called practical subjects—agriculture, home economics, industrial arts—probably broke the first ground in the attempt to integrate the school and the home experiences of the student. To-day scarcely a school system fails to identify in some way the out-of-school interests and needs of its pupils with the work of the class-room.

The most successful illustration of attempts of this character is probably to be found in those rural schools that are endeavoring consciously to exploit the possibilities of an education through shared experiences. For example, Miss Elsie Clapp of the Ballard Memorial School in Kentucky is not only helping children to appreciate better and to utilize more effectively the cultural, vocational, and esthetic possibilities within their environment, but through the impact of the school upon the homes the standards of community living in all these respects are undergoing transformation. Similarly Langford describes, in his study *Educational Service, Its Functions and Possibilities,* a large variety of educational activities in the Province of Ontario which point in the direction of a life-centered education and contrast with the usual subject-matter emphasis.

The necessity of protecting children from the evil effects of a city environment render more difficult, if not impossible, any very effectual participation on the part of children in life outside the school. Nevertheless, through excursions to social agencies, civic institutions, farms and typical industries, museums, and the like, children can derive first-hand contacts that serve as concrete starting points for an interpretation and understanding of the varied activities and concerns of a community. In secondary school and college opportunities for actual participation of students in social and civic agencies are more easily provided.

To reach out and make accessible to students and teachers opportunities of this character is an important task for the administrator. Nor is it an easy undertaking, since he must both find the occasion and see that it is used solely in the interests of education. All too frequently agencies that profess a social or a civic purpose are peculiarly tempted to violate good educational procedure. They easily become super-salesmen for the kingdom of heaven or utilize all the subtle instruments of propaganda. Counts, for example, in *School and Society in Chicago* portrays a number of reprehensible methods employed by the Association of Commerce in fostering in the high schools Civic-Industrial Clubs, Hi-School Press Associations, and Presidents' Councils. Thus in the "Clean-Up-Paint-Up-Plant-Up" campaigns the animating motive for a time was to use the schools for commercial purposes. In the case of the Hi-School Press Association the commercial motive was less dominant, but the organization evidently served as an open medium for inculcating the ideals of the Association.

Not all contacts with the social and civic life of the community need be of this character. In the first place there are many agencies such as settlement houses and other philanthropic and civic organizations whose purposes are broadly social and representative of no special interest. These may serve the purposes of laboratories for study as well as afford some opportunities for direct service on the part of students who may wish to participate in their activities.

It must be admitted, however, that on the whole the larger community in our cities is limited at present in its socially useful and socially motivated functions, and the opportunities for children and young people to participate directly in such functions are relatively restricted. But where they exist and are utilized, it is the school that must ensure participation of an educational character. It is the responsibility of the administrator to bring about a relationship between the school and the agency such that educational values come to the fore. That is to say, he must strive to establish a relationship between teachers and outside groups of such a character that students by virtue of their participation acquire an increased knowledge and a critical understanding of social relationships, self-directive methods of procedure, and a sensitive responsiveness to conditions operating in the lives of others.

A program of this nature, when carried out with understanding, holds forth the possibility of transforming the attitude of outside groups with reference to their own responsibilities toward children. This endeavor of the administrator to help the community function more consciously with reference to the educational needs of children leads him to apply the method of cooperative functioning to relations between the school and all other instrumentalities concerned with child life. In every community there are numerous agencies that deal with children: the police department, settlement houses, social workers, welfare agencies, the health department, playground directors, and so on. All too frequently they operate in ignorance of each other. It should be the school's concern that these agencies be brought together so as to function for the city as a whole, or in separate districts in such a manner that the needs of the whole child are considered and the methods employed in dealing with him are directed towards the ends of healthy growth.

THAYER, VIVIAN TROW, in *The Educational Frontier* (New York, Appleton, 1933), pp. 243-246.

440

The Right of the State to Maintain Schools

The provision of schools to enforce the obligation imposed by the State, though, requires money, and the better the schools provided, the more they are likely to cost. Even state supervision of education, were the provision of schools left entirely to private or religious initiative, also would cost something. This cost must be defrayed from public funds, and these must come from individual, group, or general taxation.

Just how schools should be supported must be determined by a consideration as to their nature. If they are only or largely of personal or local benefit, such as telephone service, street-lighting, pavements, or streets, then they should be supported by individual or local taxation. Being conceived, though, as essential to the welfare of the State as a whole, then their support should be by the general taxation of all, and not from taxes or fees paid by the parents of the children educated. The establishment of this principle, that the wealth of the State must educate the children of the State, required time and effort, for it virtually meant the confiscation of a portion of the fruits of the labor of all men, and in proportion as they by hard labor and thrift had been able to accumulate a surplus, and the use of the part so confiscated to educate the children of the State, regardless of whether or not the particular parents of the children educated had any surplus wealth to be so confiscated.

This is an essential state service to which all owners of property must be subject, and no man can expect to escape his share for support by sending his children to a private or parochial school. This of course he is free to do, as we have so far in our history not seen any reason for limiting this right of choice, but the exercise of such freedom and choice cannot be expected to relieve him of his proper share for the support of so essential a state service as public education. Equally might he claim exemption from taxation for the maintenance of police because he is a law-abiding citizen, from the support of the fire department because he has built his house of concrete, and from taxation to purchase and maintain parks because he has attractive grounds around his home and does not visit the parks maintained by the public.

CUBBERLEY, ELLWOOD P., *Public Education in the United States* (Boston, Houghton Mifflin, 1919), pp. 489-490.

441

The Distinctive Function of School Administration

It is not solely in its relation to the learner that the school should observe the precepts of education. It always should bear witness to its major functions in all its dealing. This implies the fostering and creation of living arrangements which permit of an intelligent sharing of experiences. It means an organization of such character that each one participating performs his own special work with a full realization of its implications and effects upon associates and the larger aims of which he is a means. A school system should typify and exemplify in its operations as a whole and in the functioning of its parts, the process which is the be-all of its existence. It should stand forth as an educational institution, and to make these purposes manifest is the distinctive function of school administration.

BODE, BOYD H., in *The Educational Frontier* (New York, Appleton, 1933), p. 256.

442

In the Sacred Name of Education [1]

We may recognize many splendid, constructive things that progressive education is doing for our children, but we cannot stand calmly by while some of the experimenting is carried on. Whether time will prove that what looks like the sacrifice of our children in this progressive experiment will be worth while to future children seems to us beside the point. We find ourselves strangely apathetic concerning these future unborn children. We are frankly too worried about our own children. Perhaps the modern method of education is fine for a child who is naturally studious, and who has initiative and drive. For Johnny, who studies perforce, whose mind wanders, who is apparently without personal ambition, who admires achievement in his classmates but feels no urge to emulate them, the present method of education does not fill the bill. In common with many of his contemporaries, Johnny has to be taught to study and then be made to do it. In his first two years of public school he was apparently drawing, singing, and hammering all day. Sometimes it seemed to us that he got nothing but nose-colds out of his five days a week in school. Obviously the methods in use in the schoolroom undid much of the training attempted at home. If an occupation suggested by his teacher failed to interest him, it might be abandoned in favor of painting, block-building, looking at picture books, or any other branch of "loafing." The theory seems to be that, after this treatment, the pupils will eventually return to the once-hated occupation with a real enthusiasm.

---

[1] For reply, see *Progressive Education,* December 1933, p. 483.

Is it really ever too early to begin to teach children that their will is not law? Does freedom to follow their own inclinations fit them for living in the world as it is today?

A quiet, orderly schoolroom for small children is a liability nowadays. How can Johnny learn to concentrate with Jack and Jill building a house of blocks in one part of the room, with the teacher instructing a group in another, and a noisy game in progress in still a third? He may or may not learn concentration. Inevitably, it seems to us, he does not learn courtesy or consideration for the other fellow, and his young mind and body must subconsciously react to a confusion which they might well be spared. Discipline, it seems, has been abandoned, and drill almost discarded. . . .

What do we really want for our children?

First of all, we want them to have a better foundation, to be taught the fundamentals—reading, writing, arithmetic, spelling, history, geography, and physiology. We would like trimming and frills and all extraneous subjects added only if their inclusion does not sacrifice the essentials by an iota. We would like nothing in the curriculum in which each and every child could not participate. We wish no specializing in our public elementary school. Secondly, we want all subjects taught thoroughly. We want drill and practice sufficiently employed in school to insure thoroughness. We would like discipline to be enforced more than is usual in most of the elementary schools, with greater stress upon order, quiet, respect for teachers, consideration for other children.

After lessons have been assigned, we want the teacher to insist that they be reasonably well prepared, neatly and legibly presented. We want our children held to their obligations, and penalized if they evade them. We do not want them excused because the 3:30 bell has sounded and the teacher's car is parked in front of the school.

We want teachers to discontinue taking it for granted that children have absorbed the given instruction. We want them to check up on their students. When they discover how little one actually knows, a check-up, too, on how and why he has managed to absorb so little may be illuminating.

Thirdly, we would wish that teachers might be chosen who have a real interest in educational subjects, enough practical psychology to bring out each pupil's best, and as far as possible, a cordial interest in the individual pupil. We want teachers who teach, instead of merely hearing recitations. We wish, too, that besides a degree, the teacher might have an integrity that could not fail to be felt by the children. We are old-fashioned enough to wish that the much-abused word "lady" could be fittingly applied to each young woman who is given a position. Wonderful indeed it is, and lucky for the children, when the teacher has a real vocation, when she values her work and counts it one of the most important callings in the world. That teacher can do for our children what money cannot buy or pay for, and great should be our appreciation of the far-reaching benefits of her example and influence. Are our requests reasonable? Do our arguments deserve better than the patronizing smile and lack of consideration that they usually receive? Is there a way to establish cooperation instead of antagonism? If the average boy in public school is not getting a fair deal in some ways, can we help him to get a New Deal?

"A Parent's Protest," in *Progressive Education* (October 1933, pp. 321-325).

CHAPTER XIX

Tests and Measurements in Education

THE material in this chapter deals with the subject of measurement in education. The selection from McCall (443) lists what he calls the elements of a philosophy of educational measurement. The student may or may not agree with all of the propositions, but before he passes judgment he should read the chapter in McCall's book in which the propositions are explained. The student should also read carefully Monroe's list of assumptions implied in the measurement of mental abilities (445).

Buckingham reminds us (446) that "good judgment on the part of teachers will always be required to supplement objective measures and to take the place of such measures when they are not at hand." Terry (454) calls attention to a fact of which teachers could probably make more judicious use. The selection from Heilman (462) is included as an example of the significant type of scientific investigation now going on in the field of educational measurement. Other selections to which the attention of students is called are 444, 450, 459, and 463.

443

Elements of a Philosophy of Educational Measurement

1. Whatever exists at all, exists in some amount.
2. Anything that exists in amount can be measured.
3. Measurement in education is in general the same as measurement in the physical sciences.

4. All measurements in the physical sciences are not perfect.
5. Measurement is indispensable to the growth of scientific education.
6. Measurement in education is broader than educational tests.
7. There are other things in education besides measurement.
8. To the extent that the pupil's initial abilities or capabilities are unmeasurable a knowledge of him is impossible.
9. To the extent that any goal of education is intangible it is worthless.
10. The worth of the methods and materials of instruction is unknown until their effect is measured.
11. Measurement of achievement should precede supervision of teaching method.
12. Measurement is no recent educational fad.
13. Tests will not mechanize education or educators.
14. Tests will not produce a deadly uniformity.

McCall, William A., *How to Measure in Education* (New York, Macmillan, 1922), pp. 3-18.

444

The Measurement of Accomplishment

The measurement of accomplishment is conducted formally and informally, objectively and subjectively, and by verbal and non-verbal tests of performance. Measurement grows out of the need to discover the status of pupils before, during, and after work upon a given unit. It is in terms of the specific objectives of education and the responses that actual pupil self-realization is revealed. All adequate procedures are continuous processes of varied measurements.

Many of the writers of the subsequent chapters in this volume show the great advance which has recently been made in measurement by means of tests that are relatively objective, reliable, and valid. They indicate with equal clearness the futility of tests of information as sole measures of pupils' accomplishments. Pieper, in his chapter on science, shows, for example, that the purposes of science teaching in schools demand that many facts be mastered, but he shows that information tests may fail to indicate either ability or desire to use scientific data.

In many subjects one can employ new-type examinations which require not only factual accomplishment but also ability to organize facts logically. Such a test, though difficult to prepare, has obvious advantages over essay tests which are difficult to score. As devices for measuring quickly a pupil's acquaintance with many details, new-type examinations are so much more comprehensive than essay tests that many educators regard the time spent in preparing new-type quizzes as well spent. The relative value of new-type and old-type examinations is, according to Brinkley, about equal, whether the tests are employed to measure general achievement, ability to think in terms of the content of a course, or information. This statement is qualified, however, by the provision that the testing periods be of equal length and that the teachers shall have had expert training for the preparation of tests.

Finally, tests have three purposes: judicial, instructional, and diagnostic. The judicial purpose, which teachers adopt when they attempt to discover how successful they have been, has relatively important and also relatively unimportant values. Of great importance is knowledge of the status of pupils, provided such knowledge is used as one of the guides in the planning of subsequent work. This purpose, though important, is generally of relatively small value when knowledge of pupils' status is used only for purposes of marking and classifying pupils and measuring teachers' work.

Measurement, when emphasis is upon the immediate instructional value of the devices used, may spur pupils to work, induce reviews, or provide for the application of what has been studied. When so employed, measurement may include the accounting of the value of either extensive reading or of a ten-minute quiz. For extensive reading can be employed not only as an educative activity, but also as a measure of pupils' interest in their academic work. As measures of progress, extensive reading, supplementary laboratory or shop work, and other forms of voluntary or semi-voluntary activities indicate achievement, spur pupils to work, and provide application of attitudes or powers that have been developed. Although the results of such tests of accomplishment have not yet been stated in objective, valid, and reliable terms, the fault is not necessarily so much with the procedure as with deficiencies in testing programs. Emphasis is here placed upon such devices for measurement, because their importance is frequently overshadowed by the definite and apparently trustworthy results of other forms of tests. An adequate testing program includes both formal and informal devices.

The diagnostic values of tests consist of their power: (1) to discover pupils' needs and show points of departure, as in work upon a new unit of a course; (2) to guide in remedial work, if needed; and (3) to show justification for exemption from further work by capable pupils. As in the case of other values of measurement, these values can sometimes be obtained by informal discussions which reveal to a discerning teacher the next steps in her pupils' training; while, at other times, formal, new-type tests are more effective for the same purpose. A great advantage of new-type tests for the purpose is that the test is a definite and fairly certain device, whereas an informal test may be indefinite and very uncertain in results. Here, again, Brinkley's appraisement of tests may be applicable: the value of tests depends more upon the person who devises and administers them than upon the form of the tests.

UHL, WILLIS L., *The Supervision of Secondary Subjects* (New York, Appleton, 1929), pp. 32-35.

445

Assumptions Implied in the Measurement of Mental Abilities

1. It is assumed that the performance sustains a constant functional relation to the ability which is being measured.

2. It is assumed that the performance is the product of the functioning of certain mental processes or abilities and no

others, at least not in a way to disturb the constant functional relation.

3. It is assumed that we can secure the functioning of a given ability for the purpose of measurement.

4. It is assumed that the testing conditions can be controlled, not only through a single testing period, but also on subsequent occasions and by different examiners.

5. In the measurement of general intelligence it is assumed that all pupils tested have had equal opportunities to acquire the abilities for which the test calls.

MONROE, WALTER S., *The Theory of Educational Measurements* (Boston, Houghton Mifflin, 1923), pp. 22-23.

446

Other Judgments Than Those of Intelligence Needed

Although the testing movement has gone to considerable length, good judgment on the part of teachers will always be required to supplement objective measures and to take the place of such measures when they are not at hand. I plead for expertness in the making of these judgments whether they be of intelligence, or of emotional or moral traits. Most of the things said above regarding intelligence are applicable to these characteristics. It is precisely because we have fairly accurate measures of intelligence that we have been able to identify at least a few of the causes of error in judging intelligence. Probably our judgments of other personal qualities are vitiated by the same disturbing influences. By attention to these influences, more reliable estimates may doubtless be made. Thus the refining of teachers' judgments applies much more broadly than to intelligence. We realize that success in childhood and in school pursuits as well as in adulthood and in society depends very largely upon emotional characteristics and upon industry, friendliness, and other personal qualities. If the lessons we may learn from the appraisal of intelligence can be carried over so as to refine our judgments of these important human traits, we shall be able to apply educational guidance in a high and worthy sense. We shall make the school something more than a training ground, an institution which will ascertain the capacity and needs of every individual child and regulate its influences upon him according to this expert diagnosis of conditions.

Buckingham, Burdette R., *Research for Teachers* (New York, Silver, 1926), pp. 153-154.

447

Measurement in Education

Whatever exists at all, exists in some amount. To know it thoroughly involves knowing its quantity as well as its quality. Education is concerned with changes in human beings; a change is a difference between two conditions; each of these conditions is known to us only by the products produced by it—things made, words spoken, acts performed, and the like. To measure any of these products means to define its amount in some way so that competent persons will know how large it is, better than they would without measurement. To measure a product well means so to define its amount that competent persons will know how large it is, with some precision, and that this knowledge may be conveniently recorded and used. This is the general *Credo* of those who, in the last decade, have been busy trying to extend and improve measurements of educational products.

Thorndike, Edward L., "The Nature, Purposes, and General Methods of Measurements of Educational Products," in the *Seventeenth Yearbook* (1918) of the National Society for the Study of Education, Part II, p. 16; (Quoted by permission of the Society).

448

Mental Testing Wise and Necessary

If democracy demands that provision for individual differences be made in our educational program, then it becomes a matter of prime importance to find a reliable means of discovering such differences. Until recently satisfactory means of accomplishing this were not available. The science dealing with human capacities and traits has lagged far behind the physical sciences, but the measurement of intelligence is at last on a fairly scientific basis. It can no longer be doubted that the intelligence test has a value far beyond mere personal judgment in predicting the learning ability of a child. Is it undemocratic to ascertain *by test and by trial* that some children are able to accomplish more than others, and to make provision accordingly? We have repeatedly expressed the conviction that a mental test should not be the sole criterion used in the school placement of a child and that both test and trial are essential. We agree fully with those who claim that a child must not be hampered in school progress as a result of an unfavorable test. Yet if a mental test assists in analyzing the needs of the child, and in determining how best to meet those needs, certainly it would be not only undemocratic but educationally wrong not to give him as well as ourselves the benefit of that assistance. Hence we must inevitably conclude that mental testing is not only a wise but necessary part of any educational program that looks toward the fulfillment of democratic ideals.

DICKSON, VIRGIL E., *Mental Tests and the Classroom Teacher* (Yonkers, World Book Company, 1924), pp. 225-226.

449

The Examination

The examination is the opportunity of the students to react in a large way upon the material covered, their last time for full self-expression in the field treated. The character of the examination itself should emphasize correct ideals in study, not stuffing the mind for a future relieving disgorgement, but assimilating knowledge for use. An examination should test ability as well as memory; thus it should contain new questions and problems, it should allow free play for criticism, and it should give the student enough range for him to show where he is strong instead of seeking to find his weak points. The pupil should prepare for an examination in the same spirit in which he habitually studies, viz., to know in order that he may be able to do.

Horne, Herman Harrell, *Story-Telling, Questioning and Studying* (New York, Macmillan, 1919), p. 162.

450

Use and Abuse of Tests

The importance of the test as a means of securing study has long been recognized, and, as a consequence, it has had a prominent place in school training—doubtless too prominent, especially in elementary schools, where it has often taken the place of needed instruction and drill. There is also a very close relation between both instruction and study and the nature of the tests applied to the results. If the tests touch only the memory, the pupils will memorize; if the tests are narrow and technical, the instruction will be narrow and technical; if the tests run to figures, the drills and study will run to figures; if the tests demand details, they will emphasize and make imperative all "the lumber of the text-books." It may be stated as a general fact that school instruction and study are never much wider or better than the tests by which they are measured.

The test has been widely abused in American schools, and this abuse has had an unfavorable influence, especially on elementary education. The use of tests that chiefly touch verbal memory, once almost universal, has been the occasion of much of the stupid memoriter work which so long characterized school training, and the use of examination results as a means of comparing the standing of schools and pupils has narrowed and made mechanical the instruction of many a corps of teachers capable of better work. It is, indeed, difficult to determine which is the greater evil, the use of improper tests or the improper use of test results. One of the most important problems in the management of graded schools is to determine how to subject the results of instruction and study to thorough testing, and not narrow and groove such instruction and study.

White, Emerson E., *Elements of Pedagogy* (New York, American, 1886), pp. 147-148.

451

Importance of Measuring Results in Education

Why measurements in secondary education? Because measurement is essential in the educative process. Psychologists tell us that learning takes place more readily when the results are accompanied by satisfaction. Much of the learning in school does not result in immediate satisfaction as does the hitting of a target or the drop kicking of a ball between the goal posts. In fact, much of the learning in school is like driving a golf ball over a hill. One may practice indefinitely driving a golf ball over a hill without any gain in accuracy or distance, because he cannot see where the ball lands. Activity is essential in learning, but one must be able to measure success or failure and improvement. That is what measurement in education aims to accomplish.

Symonds, Percival M., *Measurement in Secondary Education* (New York, Macmillan, 1930), pp. 8-9.

452

Importance of Measurement of Intelligence

All classes of intellects, the weakest as well as the strongest, will profit by the application of their talents to tasks which are consonant with their ability. When we have learned the lessons which intelligence tests have to teach, we shall no longer blame mentally defective workmen for their industrial inefficiency, punish weak-minded children because of their inability to learn, or imprison and hang mentally defective criminals because they lacked the intelligence to appreciate the ordinary codes of social conduct.

Terman, Lewis M., *Measurement of Intelligence* (New York, Houghton Mifflin, 1916), p. 21.

453

Measurement in Education and Life

Measurement is everywhere in education and in our daily lives. Measurement is no rare freak. It gets up with us in the morning and goes to bed with us at night. The mile stone, the hand of the watch, the humble cup in the kitchen, the lengthening shadows of the trees on the grass, the spacing of the year into seasons, all indicate how ubiquitous measurement is. And measurement is just as immanent in the whole educational process as in life in general. There are other things in education besides measurement, but they have no value so long as they are dissociated from it.

McCall, William A., *How to Measure in Education* (New York, Macmillan, 1922), p. 12.

454

Students Study Differently for Different Types of Tests

Teachers in general are well aware of the fact that tests are powerful stimulants to study. What kinds of study are, on the other hand, motivated by the several available types of test, is another matter. On this question the profession has as yet but little information.

In a recent investigation it was shown that college students do not study in the same way for essay tests (the traditional type) as for objective tests. When they review for the former they look for the main points and endeavor to strengthen their grasp of subject-matter in large units taken as wholes. In reviewing for objective tests, on the contrary, they look for details and work with small units.

The objective of the present investigation is to raise the same question in respect to three types of objective tests. Do students review for the listing recall type or objective test in the same manner as they review for completion or for true-false tests? If they do not, what methods of study do they find especially well adapted to this type and to that type? When the evidence on these questions has been weighed, it may be possible to point out conclusions in respect to the use of different types of tests to which teachers should give consideration when they lay out their instructional plans. . . .

Throughout this study it has been assumed that how students study for a test is properly as much a matter of concern, on the part of the teacher, as what they study. A decided majority of the students who served as subjects in this investigation study differently for the three types of objective tests. The kind of test to be given, if the students know it in advance, determines in large measure both what and how they study. The behavior of students in this habitual way places greater powers in the teacher's hands than many realize. By the selection of suitable types of tests, the teacher can cause large numbers of his students to study, to a considerable extent at least, in the ways he deems best for a given unit of subject-matter. Whether he interests himself in the question or not most of his students probably will use the methods of study which they consider best adapted to the particular types of tests customarily employed.

Terry, P. W., in *Journal of Educational Research* (Bloomington, Public School Publishing Company, 1934), Vol. XXVII, pp. 333-343.

455

Uses and Values of Written Tests

It is thus seen that the written test may be wisely and profitably used . . . especially in reviews, and that it may be used, with special advantage, at the completion of the several subdivisions of all branches of study, and at the completion of each branch. When thus used as an aid to teaching and study, the written test has several special advantages. It is more impartial than the oral test, since it gives all the pupils the same tests and an equal opportunity to meet them; its results are more tangible and reliable; it discloses more accurately the comparative progress of the different pupils, information of value to the teacher; it reveals more clearly defects in teaching and study, and thus assists in their correction; it emphasizes more distinctly the importance of accuracy and fullness in the expression of knowledge; it reveals more fully than the ordinary language exercise the ability of the pupil to write correctly when his attention is directed to the thought or subject-matter; it is at least an equal test of the thought-power or intelligence of pupils, since this result, in both methods, is dependent upon the nature of the tests; and, lastly, the certainty of the coming written test affords a healthy stimulus to pupils, increasing their attention to instruction, and their efforts to master the subjects taught. It is, of course, possible for a teacher to neglect or slight the recitation proper, and make a hobby of the written examination, a frightful bugbear to sensitive pupils, and the source of rivalry, worry, overstudy, and other evils; but we are now considering the written test, not as a substitute for the oral test, but as supplementing it in the current work of the school, and used in the same spirit and with equal common sense. When thus used, the written test is a most valuable means of school training. It is not only in harmony with the freest and most rational teaching, but may be made a valuable aid to such teaching—a fact attested by the experience of the most progressive and skillful teachers of the country.

WHITE, EMERSON E., *Elements of Pedagogy* (New York, American, 1886), pp. 197-198.

456

Standardized Educational Tests and School Publicity

The measures of achievements yielded by standardized educational tests of pupils lend themselves to publicity. They are definite numerical facts. When they are set beside the corresponding norms, or similar data from other school systems, they will appeal to many patrons of the school. Generally the patrons will be interested, especially, if their school is shown to stand high, or the results of the tests tend to corroborate their opinions.

We have already said enough in other connections concerning the limitations of standardized educational tests to make it clear that a supervisor should be cautious in presenting the scores obtained. In addressing a lay audience it is probably unwise to emphasize the errors involved in our present measurements, but the tests should not be presented as instruments yielding high accurate measures. To the layman accuracy has a meaning derived from the measurement of physical objects. A test may be highly accurate among tests, but in comparison with instruments for measuring physical objects all of our tests are very inaccurate.

When a supervisor presents the results of a testing program to his constituency he must remember that his audience is not critical. They are relatively unacquainted with the tests used and their limitations. To them he is vouching for the interpretations as well as the validity of the facts. The way in which the facts and the comparative data which accompany them are presented influences to a large extent the interpretation. The supervisor should, therefore, be careful to present the facts so that they will be properly interpreted.

Monroe, Walter S., *The Theory of Educational Measurements* (Boston, Houghton Mifflin, 1923), pp. 274-275.

457

Mental Growth Charts

The psychologist for the Winnetka Schools (William H. Voas) has worked out an interesting prediction chart, from which the classroom teacher can determine at a glance the child's approximate mental maturity at any date, and on which he can plot very easily the child's academic progress in relation to his stage of mental growth. These growth charts are making possible a degree of adaptation to individual differences which the Winnetka Schools were never before able to achieve. The tendency in the past, in spite of all the emphasis we were able to give to the contrary, was for parents, teachers, and children to be satisfied if a child was doing a grade of work a year, and to be dissatisfied if he was doing less than a grade of work a year. The mental growth charts bring into bold relief the child who is working far below capacity, even though doing an average amount of work, and likewise, the slow-maturing child, whose parents and teachers have been egging him on to efforts beyond his ability. Now each child's work is planned every six weeks by the teacher in consultation with the child and with a background of knowledge on the teacher's part as to the child's stage of mental growth and what work is appropriate to that stage. Each child's objectives are set in terms of his own needs and abilities and not in terms of those of the class.

As our knowledge of the curriculum and its organization has increased, we have naturally attempted a continual revision and perfection of the textbooks and tests used by the children. Individual work in the mastery of basic knowledge and skills necessitates self-instructive textbooks, organized in such a way that each child may learn each new step for himself, with a minimum of help from the teacher. The organization must include not only very clear, simple, and child-like directions, but ample practice so that the child may master one step perfectly before going on to the next, with provision at the same time for short cuts for the child who can master the step easily. As a means of developing the child's own sense of responsibility and of relieving the teacher, self-correction of the daily practice work must also be provided, so that the child can himself tell whether his practice exercises have been worked out satisfactorily. Self-testing is also provided, followed by complete diagnostic test given by the teacher.

These tests have as their sole purpose the discovery of the child's weak points and the pointing out of the appropriate remedial work to overcome the weaknesses. The tests are never graded or marked. Instead each error in the test calls for a specific recommendation as to the type of work necessary to overcome the weakness shown.

This system of self-instructive textbooks and complete diagnostic tests, with appropriate remedial work, has been in force in the Winnetka Schools ever since 1920. But continual research has been going on in an attempt to perfect the organization, presentation, and content of both text and test material.

WASHBURN, CARLETON, in a pamphlet, *Recent Developments in the Winnetka Schools,* 1935.

458

Importance of Teacher's Judgment

Teachers' marks are important because they are now and will continue for some time to be the most universal method of rating pupils. In fact, they may continue forever to be the criterion for classification, because teachers will soon be familiar with the simple mysteries of scientific measurement. They will themselves use tests with the same ease and fluency that they now use textbooks. More and more they will base their judgments upon objective rather than subjective measurement. When this time arrives teachers' marks will be not only as accurate as objective measurement, but they will be objective measurement plus something else.

This something else makes teachers' marks valuable even apart from objective tests. They are significant segments of each pupil's make-up which tests do not now touch. In occasional instances this segment has more importance for classification than the segment measured by tests. Teachers' judgments appear to be the only immediate hope of measuring pupils' purposes. Furthermore, the teacher can weigh physical, emotional,. and social characteristics in ways that tests cannot. In so far as these elements in the make-up of a pupil are aims of instruction, and in so far as they are *improvable by school instruction,* they ought to be weighed in determining promotions. Hence the teacher's judgment should be a factor in determining promotion, at least until the time arrives where these relatively intangible abilities are shown not to exist, or to be included in the score of objective tests, or shown to be abilities which are unimprovable by school instruction.

McCALL, WILLIAM A., *How to Measure in Education* (New York, Macmillan, 1922), pp. 59-60.

459

Measurement May Be Deadening and Fruitless

Textbooks have been constructed in mere informational terms; teaching activities have been formulated with the express purpose of drilling these terms into the students; administrative functions have been developed that place a premium upon teaching which successfully fixes the terms; and our scientific development in the field of the measurement of results has glorified both the administrator and the teacher whose activities bring large masses of students quickly up to the informational levels which the tester, assuming that informational accumulations set the ends of education, has established. All of this may be splendid for the administrators and thrilling for the testers; but we are beginning to realize what we should always have known, that it is deadening and fruitless for both the student and the teacher. It will be no simple matter, therefore, to break through the lines that have been struck as scientist and administrator have thus labored together to fix permanently the traditional processes of the school. None the less, the start must be made. And the first step in this direction is to reconstruct the school program for the specific purpose of steadily fostering the orientation of the individual in his real world of today.

Hullfish, Henry G., in *The Educational Frontier* (New York, Appleton, 1933), pp. 171-172.

460

Testing Is Important

No matter how carefully one tries to follow the right principles of teaching, no matter how ingeniously one selects and how adroitly one arranges stimuli, it is advisable to test the result of one's effort,—to make sure that the knowledge or power or tendency expected has really been acquired. Just as the scientist, though he has made his facts as accurate and his argument as logical as he can, still remains unsatisfied until he verifies his conclusion by testing it with new facts, so the teacher, after planning the executing of a piece of work as well as he can, must "verify" his teaching by direct tests of its results and must consider uncertain any result that he cannot thus verify.

It is true that some of the most important results of teaching cannot be verified at all by the teacher himself. The permanence of interests, the effect of moral inspiration in childhood on adult behavior and the fortification of the pupil's heart against degrading forces that will assault it years after school is done, are of necessity not subject to full or accurate verification. The results of a teacher's work upon the life of the pupils out of school are also to a large extent inaccessible to adequate observation. Finally certain changes in human intellect and character, such as nobler ideals, new ambitions and stronger powers, are hard to test even within the sphere of school and class-room life. The deeper ideals and ambitions are often cherished in secret and revealed only by some sudden access of intimacy or by unusual events.

THORNDIKE, EDWARD L., *The Principles of Teaching* (New York, Seiler, 1914), pp. 257-258.

461

Aptitude and Educational Tests Indispensable to the Educator

Aptitude and educational tests possess certain characteristics which make them indispensable to the educator. The most important of these characteristics are objectivity and standardization. Ordinary observation by unskilled observers is scarcely satisfactory for scientific purposes. Trusting to ordinary observation results in such conclusions as "the good die young," "beautiful but dumb," "slow but sure," and other generalizations which scientific observation disproves. Not all standardized tests are completely objective, but most of them are superior to ordinary classroom examinations in this respect. And school marks, even more than scores on informal examinations, are blends of ratings of many factors in addition to scholarship or academic achievement. Situations for which objective examinations are only partially available can be handled through applying the principles of measurement in objectifying observations as fully as possible. This has been done to a considerable extent in the construction of rating scales for personality and character qualities. Objective examinations eliminate the personal equation and insure the rating of pupils on the traits the test is designed to measure, eliminating the rating of pupils on a blend of factors that may vary enormously from rater to rater.

The second advantage of scholastic and educational tests is the characteristic of standardization. This term is universally abhorrent to progressive educators, to whom it conveys the notion of a standardized product, such as Ford motor cars or Grade-A apples. Standards have a somewhat different connotation when applied to educational tests. When a test has been given to large numbers of children in the general population of the age or grade levels to which the test is applicable, and when the results have been computed in terms of median or average achievement for the respective age or grade levels, and when the addition of more data of an unselected sort are added to the original data without materially affecting the original computations of central tendency in achievement, the test is said to have been standardized; that is, the expectation for pupils of the same age and grade level under similar environmental and school conditions is known, on the average. The standard in this case is not so much a goal to be attained, in the sense of attaining perfection in achievement, as it is a statement of fact about conditions as they exist. With the exercise of proper precautions, standards in this sense contribute a great deal to our understanding of pupil accomplishment and pupil ability. The use of standards in this sense may actually contribute more to "individualizing" children than to "standardizing" them, in the sense of turning out a uniform product of some desired excellence.

The use of standards is invaluable as a reference point, and this value is well demonstrated in the case of studying the development of young children. Dr. Gesell of Yale has, through careful measurement of pupil growth, discovered not only the standard serial order of infant development but the expected quality of achievement for children, on the average, at different age levels. Since mental development is so obviously a function of age at these early levels, the statement of one child's behavior is almost meaningless unless a statement of the child's age in exact terms is made. Whether a child is slow or rapid in development can only be determined with reference to the established standards. From these standards, too, predictions can now be made with a fair degree of certainty of the child's future rate of mental development.

HILDRETH, GERTRUDE H., in *Progressive Education* (Vol. X, 1933, No. 1, pp. 37-38).

462

Measuring Some Hereditary and Environmental Factors in Education

Educational achievement was measured by the Stanford Achievement Test, and was expressed in terms of educational age. In reality, therefore, we determined which of the causal factors, the hereditary or the environmental, were the most potent in producing educational age. The hereditary factors are represented by mental age as measured by the Binet Scale; the environmental factors are represented by school training as measured by school attendance, and by the socio-economic status of the home as measured by a revision of the Chapman-Sims Socio-Economic Scale.

We found that ten-year-old children differed widely in educational achievement as expressed by the amount of variation in educational age. We also found that these children differed widely in their standing in the causal factors, differences which are expressed in terms of variation. With these facts in hand it became possible to determine which of the causal factors made the largest contribution to the differences in educational achievement.

Our results show that probably 50 per cent of the variation in educational age was due to such hereditary factors as had been measured; less than 13 percent of the variation, to school training; not over one percent, to the socio-economic status of the home; and about 36 percent, to such hereditary and environmental factors as had not been accounted for. In schools and communities which differ from the schools and communities from which our data were drawn, the relative significance of these figures would have to be modified. But, as by a similar procedure, almost equivalent results were obtained for all of the ten-year-old children of Greeley, there is some evidence for the belief that they would have to be modified only slightly for different school communities of the Northern states.

I am of the opinion that the results obtained have very significant implications for educational practice in the public schools and in the higher institutions of learning. Our results show that under the prevailing home conditions and school organization, intellectual endowment has by far the most powerful influence in determining differences in achievement in the traditional curriculum. It is not unlikely that a similar statement could be made for achievement in general.

In view of the superior potency of intellectual endowment, it is far more important to make classifications in the public schools and in higher institutions of learning upon the basis of intelligence than upon differences in the amount of training. This untenable custom of classifying upon the basis of the amount of attendance is far more prevalent and more rigidly adhered to in the colleges and universities than in the public schools. It cannot be justified either by the results of investigations or by teaching experiences. Even though the brightest students devote only one-fifth as much time to their studies as the dullest, they still make the higher grades. Thus, for example, bright students who have had no courses in psychology do far better work in that subject than do dull students who have had from two to six courses in the subject. Moreover, in the public schools there are bright children who, in spite of inferior application, complete the work of the elementary school in one-third of the time required by the dull.

A second important inference is that the activities concerned with the educational and vocational guidance of children in the public schools and of students in college should receive more recognition. There should be departments in the school with the functions of classifying children, adapting school tasks and methods of instruction to their learning abilities, and of determining the probable occupational levels at which they could succeed in life.

Efficient personnel departments should also be established in all the higher institutions of learning, charged with the function of determining what students should be allowed to enter, of making the best classifications under existing practical limitations, and of guiding students into the courses and departments most nearly adapted to their interests and intellectual endowments. Such a department would eventually render more real service to the future citizens of our country than any other department in the institution. As heredity is so much more significant than training in determining differences in educational standing, there should be more effort devoted to guidance, even if less effort must then be devoted to training.

This investigation does not determine how much the children learn in our schools. It does not show how much the schools have contributed in raising the children to their present levels of attainment. But it does offer evidence in favor of the contention that in human nature there are marked differences in the possibilities of training which must be respected and provided for in every well-regulated school system and higher institution of learning.

HEILMAN, JACOB D., in the *Twenty-seventh Yearbook* of the National Society for the Study of Education (Bloomington, Public School Publishing Company, 1928), Part II, pp. 63-65; (Quoted by permission of the Society).

463

What Is Scientific?

The object of this discussion is to suggest some degree of tolerance among scientists.

Science! Science! It is heralded from our house tops, wafted on the air. It is echoed in thousands of laboratories and college halls, uttered by pupils in our grade schools and discussed by housewives and street cleaners. Our magazines are filled with it. To be outside the pale of science is to be condemned, to be lost! That would not be so bad if we could only decide when we are scientific.

We are no longer satisfied with science in mathematics, astronomy, chemistry, physics, medicine, and biology, but its domain has been extended into education, literature, the arts, morals, history and religion. Havelock Ellis would even have us inject science into love-making, and Judge Lindsey would carry it into marriage. We have a recent medical prediction that science will in time regulate all desires and passions of mankind. Let us hope for the control of scientific intolerance. Everything must be scientific, even to charity and ideals. But the term scientific needs some treatment itself. The legislators of several states have undertaken the job, but I am skeptical about the outcome being valuable either to the fundamentalists or to the cause of clearer thinking.

In what sense can the word scientific or science be used in order to justify this expansion? Is it possible to preserve the original mathematical quantitative notion of science and thus apply it to all that now goes under the head of research? Can and must all human experience be reduced to a quantitative basis? If we were content to define science as Herbert Spencer did, "Partially classified knowledge," we would at once recognize an indefinite number of varying degrees of the scientific. This conception of scientific variability would give us a more decent respect for those who labor in fields where classification is difficult and where it must be on a different basis. We might even coin some new terms to designate our relative procedures. At least we might limit the term *scientific* to purely quantitative considerations and apply the much heralded *research* to qualitative inquiry.

Most of our controversy arises from the fact that we are trying to apply science to phases of human experience demanding a qualitative as well as a quantitative consideration. How can history and literature ever be scientific in a quantitative sense, to say nothing of morals? Quality implies evaluation for which there is no objective standard. We may speak of one thing being better than another in the sense that it produces a given result in a shorter time and with less expenditure of energy. But as soon as we say one thing is better in the sense that it satisfies a human desire, a human need, or helps to reach the end of our strivings, all objective quantitative standards disappear.

Yet it is in this subjective court of appeals that all standards of good and bad, justice and injustice, right and wrong, beauty and ugliness, happiness and misery, morality and immorality, religion and civilization are formed and stored up. These standards rest on the desires, needs, and cravings of the human heart, without which nothing, not even life itself, would have value.

Is it not clear then that scientific accuracy in a quantitative sense becomes impossible in proportion as we are dealing with the complexity of these introspective cravings of mankind? Shall we, therefore, pronounce all forms of research that fail to reduce their results to mathematical tables and graphs unscientific? Must psychology, for example, abandon all forms of introspection or continue to be designated as unscientific? Thirty years ago the social sciences started on the road to mathematical accuracy and much has been accomplished, but when the sociologist makes no suggestions concerning relative values of the different lines of activity or fails to offer some plan for future betterment, he will certainly fail to meet the demands of society. He makes the fatal error pointed out by Mr. Hyde, "of thinking that the measurable is identical with the significant." This I take to be the underlying, most significant statement of Mr. Hyde to sociologists and psychologists, in his valuable article on *Can Science Control Life?* We shall return to it again.

Let us admit that mathematical accuracy should be the goal wherever possible, but let us not think lightly of the great endeavors that lie beyond quantitative science even in the subjective field of human values. So long as there is an honest effort to secure all the facts possible, to apply them to man's needs, and so long as love of truth means more than victory, the procedure is praiseworthy as being scientific. . . .

Remember that when we are dealing with human relations and human rivalry we have introduced a powerful factor largely unknown in building a bridge, discovering a new chemical element, or sounding the depths of the sea. Whenever mind is pitted against mind we have a different problem.

To turn our attention to the part which personal ends and personal gain play in defeating scientific accuracy is no pleasant task. Thousands of students are now engaged in some line of research on which their graduation and future positions depend. What a strain on human nature! In fields of great uncertainty and of unstable conditions thesis-making may flourish. But in many cases common sense would have told anyone where the research would come out. Thesis-making is becoming the most dangerous disease of higher education.

Here let us return to that statement of Mr. Hyde— "The measurable is not identical with the significant." In the first place, what is the significance of most of these researches on the ability of these graduates to teach high school boys and girls? Or what would be the significance of a thesis on the Sex Complex of Milton to anyone? In every large school where thesis-making is carried on there should be those individuals who have some large grasp on life as a whole and whose duty it should be to guide students to the more significant.

To look upon new facts as valuable in themselves is dangerous. Psychology has accumulated a vast number of facts about rats, a large number of which have no more significance than the number of grains of sand in a cubic foot on Daytona Beach would have. Scholarly enthusiasm comes not from thesis-making but in pursuit of a great cause pregnant with significance. The young researcher needs high-minded guidance to the end that he may avoid useless and evident investigations.

However, the evil is wide spread. The Carnegie Foundation carried on an extensive investigation concerning high school athletes and reported to us that a larger per cent of them go to college than of other boys and that in college they make an average record. Did we need an investigation to tell us that? Both facts are evident to any one acquainted with school life. More recently we have an investigation concerning corruption in athletics about which there seems to be a diversity of opinion. The results of many other investigations in various fields were either evident in advance of time or the personal desires of the investigators directed the collection of facts.

In other cases personal gain and antagonism play a detrimental part. Who does not look with skepticism upon some of our educational surveys? A special expert is brought two or three thousand miles and paid one thousand dollars and expenses to give a critical estimate of your school system. At the same time an electrician is in a similar way brought to the same town by a business firm interested in the possibilities of a great power plant. What difference would you expect in the reports of these two men?

Historical research will always consciously and unconsciously suffer from the limitations of human bias and prejudice. There have been many efforts to reduce history to a science, especially that of Henry Adams, only recently so ably presented by James Adams in the "Yale Review." Here we have the suggestion that we need to "depersonalize" historic characters by the use of symbols such as are employed in algebra and chemistry. Even if this were possible, how could the historian become "depersonalized"? No historian of the World War can free himself from subjective conditions that influence his interpretations. Mr. Bury, who made a praiseworthy effort to reduce history to a science, claimed that history like other sciences should be treated as an end in itself. However, he later admitted that "human knowledge has no value out of relation to human life." . . .

In conclusion, I wish to say that I have faith in science and in the scientific method. But I am only reacting against an over-passionate worship of mathematical scientific accuracy; against the failure to recognize varying degrees of possible scientific accuracy; against the condemnation and discouragement of those who work in fields demanding a different method; against a worship of figures, graphs, and curves that becomes blind to humanity. I believe that we must view life and knowledge in its totality and not in isolated parts.

Who knows but that tomorrow we may be beyond what we know as scientific today? The real problem today is not so much to bring work down to a given scientific level as it is to expand science into higher fields to meet the needs of human life and to look beyond science to that which may now be conjecture, guess, or philosophical speculation. No scientific discovery has value except in terms of human desires, needs, aims, and happiness. Which is the greater discovery, radio or the typhoid fever germ? No possible answer can be given until you begin to think of the pleasure, education and convenience radio gives, and of the safety to human life on the other hand. All *evaluation* is subjective. Let us not forget that even the physical sciences show marked tendency to the *subjective.* To quote from James Adams in "Yale Review": "Whatever scientist one reads now, above the level of the mere laboratory experimentalists and observers, who are mostly twenty years behind present thought, one is continually reminded of the subjectivity of the whole scientific structure. In this respect, men so different in many ways as Bridgman, Eddington, Whitehead, and others would seem substantially to agree."

Finally, there are three ways by which we may arrive at a better understanding of scientific endeavor. We may take a broad view of the whole field and recognize the varying degrees of possible scientific accuracy. We might, if we like, divide the vast field of scientific inquiry into different groups according to the method used and the nature of the problems involved. Or the greatest psychological lesson humanity has yet to learn is that, if any of us were placed in the same situation as those we criticize, we would follow similar lines to those we so distrust. This is true of practically all individuals and true of nations.

Phillips, D. E., in the *Journal of Educational Psychology,* Vol. XXIII, pp. 299-308.

CHAPTER XX

Education for Efficiency—Health, Vocation, Play

THE material in this chapter deals primarily with education for efficiency in life, especially in so far as efficiency is dependent on health, vocation, and play. The chapter opens with a quotation from Charles W. Eliot, one of the most influential educators of America. The student should read this selection carefully. It is full of wisdom and sound advice.

The student's attention is also called to the quotation from Davenport (465), which presents a challenge to the individual as well as to American education. The quotation from Finney (466) represents the same point of view, but distinguishes, as the author of this book does, between education for efficiency and education for culture and citizenship. Selections 482 and 483 represent opposite points of view regarding play and work in education. The student should read these selections and draw his own conclusion. The chapter contains an ample supply of material for stimulating thought and discussion.

464

Eliot on Education for Efficiency

Education for efficiency is my subject. By efficiency I mean effective power for work and service during a healthy and active life. This effective power every individual man or woman should desire and strive to become possessed of; and to the training and development of this power the education of each and every person should be directed.

Let me say at once that this education for efficiency is not a training which should cease with youth. On the contrary, it should be prolonged through adult years, until the powers of the mind and body begin with added years to decline.

Now all education at every stage of life comprehends two processes—the training of powers and the acquisition of knowledge. Childhood and youth are the time for acquiring new mental processes and functions and for exercising and strengthening the memory. The child initiates new processes of thought and establishes new mental habits much more easily than the adult; but the adult, with trained powers, has an immense advantage over the child in the acquisition of information. The important thing in childhood is, therefore, to train the child in as large a variety of mental processes as possible, and to establish as many useful mental habits as possible. During this training an immense body of information will be incidentally acquired, but not so rapidly as the same person grown up can acquire it. The important things to accomplish through education in youth are, therefore, the initiation of mental processes and the establishment of good mental habits, with incidental acquisition of information. Continued education during adult life will provide increasing stores of information. Education for efficiency, individual or national, will take account of these different, but complementary, advantages of youth and of maturity.

The debate over the proper selection of studies in youth has been a long and wearisome one; but at last two propositions are seen to command almost universal acceptance. The first is that children and young people should study the elements of a considerable variety of subjects, such as language, mathematics, history, natural science, sanitation, and economics, not with the primary purpose of obtaining information on those subjects, but in order that they may sample several kinds of knowledge, initiate the mental processes and habits appropriate to each, and have a chance to determine wisely in what direction their own individual mental powers can be best applied. The second is that training for power of work and service should be the prime object of education throughout life, no matter in what line the trained powers of the individual may be applied.

I take up first the training of the bodily senses and the care of the body. The training of sight, hearing, smell, taste, and touch has been neglected to a most extraordinary degree. Quickness and accuracy in all the senses are of high value to the individual throughout life; and in innumerable cases some slight but unusual superiority in one or more of the senses becomes the real basis of success in life. The skill of most good mechanics depends on the sure cooperative action of a practiced eye and a practiced hand. The training of the ear should come through reading aloud, reciting prose and poetry, and music. The sense of smell deserves a careful training; for it is the daily source of keen gratification, the frequent renewer of mental associations, and the best natural protector against corrupted food, drink, and air. While the body is under training, and after it has been trained, it requires a steady and intelligent care which education for efficiency should systematically teach. Since some of the fundamental conditions of well-being in the laboring classes are physical or bodily, so knowledge about the training and care of the body, where diffused through the whole population, ought to promote greatly that well-being.

The next thing which education for efficiency should attend to is the imparting of the habit of quick and concentrated attention. A prolonged attention is not natural to children, and should not be demanded of them; but quick and concentrated attention may be reasonably expected for brief intervals from every child, and as the age increases the possible period for close attention will grow longer and longer. The difference between adults in mental efficiency is chiefly a difference in this very power of concentrated attention. Skill in discovering the means of interesting the childish mind enough to compel attention is characteristic of the good teacher.

It may seem strange to say so, but it is perfectly plain to persons who have been carefully observing the rising generations that education for efficiency must especially endeavour to induce young people to think. Now the efficient man is the man who thinks for himself, and is capable of thinking hard and long. This is a process which requires motive and will-power. To inspire the motive for this hard work at an early age, and to train the power of consecutive thinking, is the gravest problem in education for efficiency. The influence which develops the necessary motive in the thinking child or youth is, in most cases, a personal influence, which is partly stimulus, but more example. This influence should lead, rather than drive; for the personal initiative in thinking is indispensable. The fortunate child is the one who gets at home this inspiration and guidance toward thinking. If the home cannot yield this influence, the next thing to hope for is that the child may come under the influence of a teacher who thinks and inspires thinking.

Another leading object in education for efficiency is the cultivation of the critical discernment of beauty and excellence in things and in words and thoughts, in nature and in human nature. We associate the word "criticism" with the discernment of defects and inferiorities, and the mind we ordinarily call critical is apt to have a keener scent for faults, mistakes, and offences than for merits, wise judgments, and right actions; but the faculty for discerning quickly and surely excellences and virtues in persons, peoples, nature, and art is an immeasurably more valuable and useful faculty than the faculty for seeing weaknesses and sins. It ought to be carefully and incessantly cultivated by school, college, and the experience of life, for it is capable of contributing greatly to happiness as well as to material success. Toward this habitual cultivation, what is called "nature study" is of great use, because nature is full of abounding beauties and excellences and of perfect adaptations of means to ends. Let us teachers take thought for teaching on a great scale the habitual discernment of superiorities rather than of inferiorities.

Another faculty which all schools and colleges, all churches and other social institutions, and the experience of adult life should cultivate incessantly is the judicial faculty for the wise enjoyment of liberty. The reason is that the will power of the individual is the taproot of all his growth in character and efficiency. Authority curbs the will power of the individual; liberty gives it play and exercises it. Therefore the training of the will to the wise use of liberty is the great means of developing individual strength of character and national greatness. It becomes teachers, especially, to bear always in mind, and to observe in dealing with children, the principle that it is liberty alone which fits men for liberty.

The nineteenth century brought into the world for the service of education . . . the new temper of mind called the scientific. What is the real essence of this new temper or spirit, so far as it affects, or should affect, education? Is it not the passion for truth, or for the fact, as distinguished from the guess or the imagination? The implanting of the love of truth as the opposite of error and of falsehood is surely one of the greatest contributions that education can make to individual efficiency; for the human powers, if they are to be efficiently used, must be exerted in accordance with the natural and moral law, or, in other words, in accordance with the facts of the world. If the primary school teacher longs to stir the sluggish mind of one of her scholars, she must first find out what the sluggishness is due to—to poor food, to bad air, to adenoid growths, to astigmatic or near-sighted eyes, to dull hearing, or to fear, or shyness, or a broken will. She must find out the facts of the case before she can deal with it. She must learn the truth about that child before she can set it free. The most important quality in a teacher, whether for children or for adults, is genuine and transparent truthfulness. No other qualities, however brilliant, can compensate for the absence of this quality in a teacher.

Finally, education for efficiency should supply every pupil with the motive power of some enthusiasm or devotion. A life without a prevailing enthusiasm is sure not to rise to its highest level. Anyone who has read many biographies will have perceived that the guiding enthusiasm of a life often springs early into view, and that this is almost always the case in the most effective human beings. For common men and women two or three of the common loves will suffice—the love of family and home, of school and church, of mountain and sea, of nature and books, of private and public liberty, of truth and justice. For us teachers it is indeed an inspiring fact that effective and enduring enthusiasms spring up spontaneously, or may be implanted in early life; for without them education cannot procure the highest efficiency, either during youth, or for the after-life. Education for efficiency must not be materialistic, prosaic, or utilitarian; it must be idealistic, humane, and passionate, or it will not win its goal.

ELIOT, CHARLES W., *Education for Efficiency* (Boston, Houghton Mifflin, 1909), pp. 1-29.

465

No Man Has a Right to Be Useless

No man, educated or uneducated, has a right to be useless. Most men will continue to earn and ought to earn, in one way or another, the funds to pay their bills, and in this natural way will the world's work get done in the future as in the past. The education of all men, therefore, is, or should be, in a broad sense vocational, and the so-called learned professions are but other names for developed industries. In this broad sense every useful activity is included, from farming to music and painting, poetry and sculpture, from engineering to medicine and law, philosophy and theology; as wide and as varied as the activities and capacities of the human race—so wide and so varied must our education be if it is to be universal and be safe. . . .

No system of education, however good in itself, can claim to be or hope to become universal if it does not touch and benefit all classes of men and all legitimate branches of their activity, both industrial and non-industrial, vocational and non-vocational. I take it that universal education means exactly what it says—the education of all sorts of men for all sorts of purposes and in all sorts of subjects that can contribute to the efficiency of the individual in a professional way or awake and develop the best that was born into him as a human being.

DAVENPORT, EUGENE, *Education for Efficiency* (Boston, Heath, 1914), pp. 15, 60.

466

Vocational Training for Youth

There must be vocational training for every youth; every industrial process must be included in the offerings; a close articulation must be maintained between the schools and the industries themselves; but such training must supplement, and not interfere with, education for citizenship and general culture.

Finney, Ross L., *A Sociological Philosophy of Education* (New York, Macmillan, 1932), p. 249.

467

Good Health as a School Responsibility

It is a generally accepted educational principle that the school as well as the family has a definite duty with regard to the physical development of children. In discussion most teachers would admit this principle, but in actual practice not half enough is being done for the health of children, despite the tremendous changes of the last ten years. Even compared with what actually has been accomplished in some of the European countries, we are lagging woefully in the rear. There are several causes for this state of affairs. First, except in the case of infectious diseases, the parents have the final word with regard to the physical side of child nature. The school can act in things intellectual and things moral (to some extent), but it is the prerogative of the home to decide in most things physical. For instance the school authorities may say that the child must stay in this or that class, although even this power is limited in some directions; they may suspend the child from school attendance for bad behavior, or perhaps send him to the truant school or the class for incorrigibles; but when it comes to a child's need for glasses, or to have adenoids removed, or for different food, or for more exercise, the school can do nothing but recommend,—the parents decide. Second, although convinced in theory that it is part of their duty to conserve the health of the child, most teachers in practice allow the matter to be pushed into the background, to be forgotten entirely by the pressure of the demands of lessons. The field is comparatively so new that its importance has yet to become vital, not only to teachers but also to parents. Third, the lack of free clinics for treatment of all kinds handicaps the work seriously in all but the large cities. It is generally acknowledged that, in rural districts, the physical health of children is worse along some lines than in urban districts, despite the crowded conditions of the latter. These three difficulties will have to be met before the physical side of child nature will receive its fair share of attention.

NORSWORTHY, NAOMI, and WHITLEY, MARY T., *The Psychology of Childhood* (New York, Macmillan, 1929), pp. 258-259; Revised Edition (1933), pp. 290-291.

468

Vocational Training and Liberal Culture

Thus education in a democracy means a vocational training for each and liberal culture for all. So far as liberal culture is concerned, it means, first of all, that training which will ensure to each as much flexibility, or power of readjustment, as his native endowment permits. Thus he is given his largest possible measure of mastery over his vocation, of leadership in it, and of power to correlate it with the mass of activities of social life. The highest training in the vocation leads inevitably beyond the vocation. It leads first into those sciences which give principles that underlie not only the one, but also very many vocations. It leads further into social knowledge, judgment, and skill, without which effectiveness in the vocation as well as general participation in the common institutional activities of society is impossible. Lastly, it leads into those phases of culture that have been and still are pursued for their own sake, because not only the general organization and the ideals of society, but also the character of the vocations of men, are continually modified and recreated by this culture. Liberal education cannot, therefore, be separated from the vocation. It finds what is, perhaps, its most important function in liberalizing the calling, exalting it, making it masterful and noble. It can stamp out the disease of mere commercialism, and substitute the health of public service that is worthy of its reward. On the other hand, it needs the vocation to save it from vagaries, eccentricities, and trivialities, to preserve for it a sense of relative values, and to bring it into that integral relation with life through which alone the products of men can survive. For life has many aims, and in the long run each exacts its appropriate service.

Henderson, Ernest N., *Principles of Education* (New York, Macmillan, 1916), p. 569.

469

Child Development Through Play

For years play was looked upon merely as a sort of inevitable waste of time among children, but scientific study of the cultivation of these organisms has shown that play is in most respects the best, the ideal form of the exercise of the powers. Particularly is this true for the younger children, but it is in large measure true as they grow older. Play is the activity which their own natures suggest and guide; it is varied as their diverse budding capabilities require; and when free it is not carried beyond the point where one activity interferes with the development of others. The young child perhaps learns more and develops better through its play than through any other form of activity. Opportunity for varied play under healthful outward conditions is beyond doubt the chief need of children; comparative study of the mental and physical development of children to whom full opportunity for such play is given shows striking superiority, as compared with children to whom such opportunities are denied.

Jennings, Herbert S., in *Suggestions of Modern Science Concerning Education* (New York, Macmillan, 1917), p. 46.

470

The School Must Insure Physical Health

Evidently our system of education must be continually modified to meet new conditions, if it is to train boys and girls to meet the emergencies and seize the opportunities of modern life. The ideal system is the one which best meets the vital problems of the present and the near future. One hundred years ago the school could rightly lay emphasis on books and learning. These the home could not supply. But home and farm could and did insure physical health and vigor, all kinds of manual training, ingenuity, perseverance, and efficiency. Now the school must furnish all these, as well as mental discipline and culture. Especially it must insure nervous strength, vigor, poise and endurance. In one word, it must be an institution of power as well as of learning.

TYLER, JOHN MASON, *Growth and Education* (Boston, Houghton Mifflin, 1907), p. 15.

471

The Play Attitude and Mental Effort

All educators are agreed that the chief purpose of education is the acquiring of an alertness of mind and right mental habits. The attitude of mind which is found in play is the attitude which represents the greatest efficiency in all mental effort, for in all good play there is a complete absorption in the thing at hand, entire forgetfulness of self, and that intuitive following of spirit guidance which leads to the largest result with the least effort. Any work done in this spirit becomes an art. The person who goes forward into mature life carrying into his work this same self-forgetfulness, this same unconscious following of the guidance of the spirit, will be a poet, an artist, a genius; for these all are essentially grown-up children who have preserved to mature years the simplicity and spontaneity of the child.

CURTIS, HENRY S., *Education Through Play* (New York, Macmillan, 1926), p. 58.

472

The Seriousness of Play

It is the supreme seriousness of play that gives it its educational importance. Education, as we have all learned, is not simply a matter of accumulating knowledge. . . . We aim to develop power; we train the muscles and the mind; but we are no longer content unless these serve as avenues to something deeper. The question is not of learning, nor yet of power, but of character. If the lesson has struck home, the result is not merely more knowledge or more intelligence, but more boy or girl—more of a person there for all purposes. If his arithmetic has truly reached him, he will play better football; if his football has been the real thing, he will do better at arithmetic. That is the test of a true educational experience—that it leaves a larger personality behind. . . . It is only what you put the whole of yourself into that will give you a greater self return.

Lee, Joseph, *Play in Education* (New York, Macmillan, 1922), pp. 3, 5.

473

Education in the Principles of Sanitation

The truth is that the science of health conservation is at present far in advance of the practical application of its principles to and in the daily lives of the mass of our people. The greatest present need is for the education of young and old in the known principles of sanitation, hygiene, and health, because one untrained or backward community may become the source of contamination for a large number of other communities. The greatest single agency for carrying out a National program in the matter of health conservation is the public school. Health regulations without health enlightenment are exceedingly difficult of enforcement. One public school teacher, spreading the gospel of health among her pupils, is worth ten sanitary inspectors attempting to enforce the regulations of the Board of Health.

PROCTOR, WILLIAM MARTIN, *Educational and Vocational Guidance* (Boston, Houghton Mifflin, 1925), p. 176.

474

The Purpose of Physical Education

Modern man is not perfect, and industrialized society is far from perfect. He lives under many handicaps, and suffers from many limitations that should be removed. If we are honestly interested in the welfare of boys and girls in the school and the adult in society, a *laissez faire* attitude cannot be approved. To set up a program of calisthenics for the classroom in the hope that outside the school in some way the child will be given the care he needs, and the opportunity his nature requires, is to miss the essence of the whole problem of his development. The thing must be seen as a whole. Education in the school must be tied up with the play life of the child out of school. Skills, attitudes, powers are to be viewed constantly in terms of the entire life of the individual. Hence, physical education is not conducted in education for the purpose of health, although if well led and supervised it should contribute to the individual's strength, power, and vitality, but it is planned and purposed to secure development, appreciation, skills, and attitudes that will make for self-expression, play, recreation, wholesome use of leisure time, to richness and fulness of life.

WILLIAMS, JESSE FEIRING, *The Principles of Physical Education* (Philadelphia, Saunders, 1927), p. 69.

475

Gillette on Vocational Education

The phrase "vocational education" is broad enough in meaning to cover all the training courses which are needed to meet the practical demands of life.

It will be demonstrated in another place that vocational education is the logical demand of organized society. This, it will be shown, is true, because society is an organization of special structures. These structures arose out of vocational activities. In order to operate successfully through society we must be made able to use these structures by a mastery of their technique. But to come in possession of this technique, it must be vocationalized. To train for it meagerly, is to be narrowed vocationally.

To socialize education completely, would be to vocationalize it. To vocationalize it, would be so to reconstruct it and to readjust it that it would harmonize with the exact constitution of society. But society is an organization of vocational structures. It is highly specialized. Education, then, must be as specialized as society. It must be vocation, because society demands specialized members to serve it successfully.

Vocational education also has regard to the constitution, inclination, or ability of the individual to be trained. It recognizes that there are fitnesses and aptitudes in life; that not all persons can do one thing equally well. In vocationalizing the school, therefore, it is contemplated that ultimately every one will be able to find suitable training for his niche in life. Certainly if the child is worth educating, in himself and for human society, one of the greatest problems is to find where he can make the most of himself, and in what line he can prove himself most productive to society.

Vocational education, moreover, views the individual as a member of the larger social order. While it insists that he shall be vocationalized, it as emphatically insists that he shall be essentially cultured, and fundamentally moralized. To be essentially cultured is, for him, to have the information about himself, nature, and society, which is most immediate to his wants and safety. This is far different from culture as a preparation for polite society. To be fundamentally moralized, is to have instilled the habits, the reactions, and the outlook of good citizenship. Good citizenship consists in viewing conduct as related to social welfare, and is measured by it. To train for this, is broadly distinct from training into formal and traditional morals.

GILLETTE, JOHN M., *Vocational Education* (New York, American, 1910), pp. 8-9.

476

Play and Work in Education

In résumé, we note that throughout history the game has been intimately associated with the ethical and social education of men. . . . It is the form of education that has been especially prominent in the culture of free aristocracies. On the other hand, the evolution of craftsmanship has involved the development of apprenticeship or of vocational education through work. The development of written language and the accumulation of learning, with a consequent increase in the labor of preparing for social and political efficiency, caused the coercive factor to appear in liberal education. Work appeared to be first incidental to the larger play life of the school, but ultimately became the predominant feature therein. The growth of the learned ideal and of Christianity practically thrust the game out of the education of the school. In modern times it has again come forward as a means of making school work interesting, particularly to young children, cultivating the health and the civic and social efficiency that have come to be such important factors in the aim of education.

HENDERSON, ERNEST N., *Principles of Education* (New York, Macmillan, 1910), p. 405.

477

The Result of Being Rightly Occupied

When men are rightly occupied, their amusement grows out of their work, as the color-petals out of a beautiful flower;—when they are faithfully helpful and compassionate, all their emotions become steady, deep, perpetual, and vivifying to the soul as the natural pulse to the body. But now, having no true business, we pour our whole masculine energy into the false business of money-making; and having no true emotion, we must have false emotions dressed up for us to play with, not innocently as children with dolls, but guiltily and darkly. . . . The justice we do not execute, we mimic in the novel and on the stage; for the beauty we destroy in nature, we substitute the metamorphosis of the pantomime, and (the human nature of us imperatively requiring awe and sorrow of some kind) for the noble grief we should have borne with our fellows, and the pure tears we should have wept with them, we gloat over the pathos of the police court, and gather the night-dew of the grave.

Ruskin, John, *Sesame and Lilies* (New York, Mershon, no date), pp. 114-115.

478

Vocational Education a Profitable Investment for Society

The demand for vocational education under school conditions is a widespread one, and is rooted in the social and economic changes of the age. Rightly organized, vocational education will prove a profitable investment for society. The pedagogy of this education will differ widely from that evolved for liberal education, and especially in respect to making practice, or participation in productive work, a fundamental element. Vocational education must be so conducted as to contribute to the making of the citizen, as well as the worker. In the course of the development of a progressive social economy, we may expect it to be made obligatory upon every individual to acquire a certain amount of vocational education, just as the present tendency of legislation is to prevent any one from remaining illiterate. Vocational education is not in conflict with liberal education, but is a supplemental form, and may be expected to reinforce it.

Snedden, David S., *The Problem of Vocational Education* (Boston, Houghton Mifflin, 1910), pp. 81-82.

479

The Problem of Play

Play, in the scientific sense, the sense in which we shall use it, is the term we give to a series of activities as wide as the scope of human action, when those activities are performed not from external compulsion, but as an expression of the self, as the result of desire. In this sense the problem of play is the problem of a rich and free life; the problem of recreation is only one of its phases.

Gulick, Luther H., *A Philosophy of Play* (New York, Scribner, 1920), pp. 126-127.

480

Provide Play for Every Child

There is great need in the guidance of free play for teachers who know what play is, who understand the force of the instinct feelings involved and the way in which play traditions are formed. Forced play does not change character. Free play, even though there be an adult playing, has the power of modifying character profoundly. And the master of the school who can go out on the grounds and play genuinely with his boys, and be the medium of carrying high athletic traditions, is moulding instinct feeling into the fine form of character. . . .

Democracy must thus provide not only a seat and instruction for every child in the school, but also play and good play traditions for every child in the playground. Without the development of the social conscience—which has its roots in the early activities of the playground—we cannot expect adults to possess those higher feelings, which rest upon the earlier social virtues developed during childhood.

Gulick, Luther H., *A Philosophy of Play* (New York, Scribner, 1920), pp. 195-196, 264.

481

Master-Teachers and Fresh Air

Socrates taught in the streets, Plato in a grove; Aristotle's school was called the Peripatetic, because he taught walking among the trees; the Stoics were named for the Stoa, or porches, where their classes were conducted; the Epicureans met in the gardens of Epicurus, and the Prince of Teachers taught by the seaside and wayside. The world's greatest teachers have ever loved the freedom and the inspiration of the open.

BENNETT, HENRY E., *School Efficiency* (Boston, Ginn, 1917), p. 37.

482

Work and Play Must Be Distinguished from Each Other

Thus work and play must be sharply distinguished from each other. If one does not insist on respect for work as an important substantial activity, he not only spoils play for his pupil (for this loses all its attraction when deprived of the antithesis of an earnest set task), but he undermines his respect for real existence. On the other hand if he does not give him space, time, and opportunity for play, he prevents the peculiarities of his child from developing freely through the exercise of his creative ingenuity. Play sends the pupil back refreshed to his work; since in play he forgets himself in his own way, while in work he is required to forget himself in a manner prescribed for him by another.

Play is of great importance in helping one to discover the true individualities of children because in play they betray thoughtlessly their inclinations. The antithesis of work and play runs through the entire life. Children anticipate in their play the earnest work of after life; thus, the little girl plays with her dolls and the boy pretends he is a soldier in battle.

ROSENKRANZ, KARL, *Philosophy of Education* (New York, Appleton, 1886), p. 29.

483

The Meaning of Play in Education

Education that can obtain the results required by a civilized community and yet use the play spirit is the ideal. But to have children engaged in play, in the sense of free play, cannot be the only measure. There must be supervision and direction. The spirit that characterizes the activities which are not immediately useful must be incorporated into those that are useful by means of the shifting of association bonds. Nor can all parts of the process seem worth while to the learner. Sometimes the process or parts of it must become a means to an end, for the end is remote. . . . [Some activities of free play] are not drudgery because they become fused in the whole process, they take over and are lost in the joy of the undertaking as a whole; they become a legitimate means to an end, and in so far take over in derived form the interest that is roused by the whole. It is this fusion of work and play that is desirable in education. This is the great lesson of play—it shows the value and encourages the logical combination of the two activities. Children learn to play as they work. They learn the meaning and value of work. Work becomes a means to an end, and that end not something remote and disconnected from the activity itself, but as part and parcel of it. Thus the activity as a whole imbued with the play spirit becomes motivated.

The play spirit is the spirit of art. No great result was achieved in any line of human activity without much work, and yet no great result was ever gained unless the play spirit controlled. It is to this interaction of work and play that each owes much of its value. Work in itself apart from play lacks educative power; it is only as it leads to and increases the power of play that it is of greatest value. Its logical place in education is as a means to an end, not an end in itself. Play, on the other hand, that does not necessitate some work, that does not need work in order that it may function more fully, has lost most of its educational value. To work in play and to play while working is the ideal combination. Either by itself is dangerous.

Strayer, George Drayton, and Norsworthy, Naomi, *How to Teach* (New York, Macmillan, 1917), pp. 145-147.

CHAPTER XXI

Education for Culture and Citizenship

THE selections in this chapter deal with the subject of education for culture and citizenship in a democracy. It is no doubt true, as Plato says (484), that true education should fit men to be perfect citizens. Civilization in our day, however, is far more complex and education a much larger problem than in Plato's time. The writer believes that Harry Emerson Fosdick, in the quotation used in this chapter (485), states what is indeed a crucial problem of modern civilization—improved means for living, but unimproved ends for which we live. One of the most timely statements in the chapter is that from Kandel (486). The writer has been pointing out the defects in this same philosophy for the past twenty years.

Hinsdale (491) defines culture in terms of physical, intellectual, and moral obedience. According to Van Dyke (495), the right culture for a democracy is that which opens the avenues of mutual comprehension and increases the common ground of humanity; the right ideal of education in a democracy is the creative ideal. The chapter is full of material for thought and discussion. Special attention is called to selections 503, 504, and 505.

484

True Education Fits Men to Be Perfect Citizens

Then let us not leave the meaning of education ambiguous or ill-defined. At present, when we speak in terms of praise or blame about the bringing-up of each person, we call one man educated and another uneducated, although the uneducated man may be sometimes very well educated for the calling of a retail trader, or of a captain of a ship, and the like. For we are not speaking of education in this narrower sense, but of that other education in virtue from youth upwards, which makes a man eagerly pursue the ideal of perfection of citizenship, and teaches him how rightly to rule and how to obey. This is the only education which, upon our view, deserves the name; that other sort of training, which aims at the acquisition of wealth or bodily strength, or mere cleverness apart from intelligence and justice, is mean and il-liberal, and is not worthy to be called education at all. But let us not quarrel with one another about a word, provided that the proposition which has just been granted hold good: to wit, that those who are rightly educated generally become good men. Neither must we cast a slight upon education, which is the first and fairest thing that the best of men can ever have, and which, though liable to take a wrong direction, is capable of reformation. And this work of reformation is the great business of every man while he lives.

PLATO, *Laws* (translated by Jowett), Book I, 643, 644.

485

The Crucial Problem of Modern Civilization

The life of each of us is divided into two factors—the means by which we live and the ends for which we live—and nothing enters much more deeply into determining the quality of a man or an era than the handling of those two factors. This is easily illustrated in terms of the generation as a whole. The fact distinguishing our day from previous times is obviously our mastery over the scientific means of life. One after another the forces of the universe, from steam to the impalpable vibrations of the ether, have been harnessed for our service, until we possess, as no previous age even in its dreams possessed, the means of living. But when we turn our thought from the means by which we live to the ends for which we live, are we so sure that we are on a correspondingly higher level than our fathers? . . .

Everywhere, when we compare ourselves with previous generations with reference to our means for living, we are supreme, but whenever we turn our attention to the ends for which we live, a different picture presents itself. "Improved means to an unimproved end"—how much of our modern life is summarized in that shrewd phrase of Thoreau! . . .

That phrase comes as near as any I know to stating the crucial problem of modern civilization. Ever since James Watt made his steam engine and the era of scientific inventiveness got well under way, we have been absorbing ourselves in the creation, accumulation, elaboration, multiplication of the means of living. But that second matter cannot longer be kept in the background. It crowds up into the front. It is the crux of the situation today. Unless we can reestablish the spiritual ends of living in personal character and social justice, our civilization will ruin itself with the misuse of its own instruments. And just as soon as we begin thinking about the spiritual ends of life we are thinking of religion. . . . The trouble is not with our means; it is with our ends—and there is no cure for that difficulty except the revival of genuine Christianity with effective intellect to make it work.

Fosdick, Harry Emerson, *The Hope of the World* (New York, Harper, 1933), pp. 39-41, 48.

486

Education and Social Disorder[1]

At a time of unrest and unsettlement there is something attractive and alluring in such new slogans as "a new education for a new America," "a new education for a new social order," or "education for social reconstruction." The implication is, of course, that all education has in the past aimed at maintaining and conserving the status quo; that social reconstruction was nowhere contemplated; and that educators and teachers have cut themselves off from life to impose upon unwilling youth imprisoned in cloistered schools an education which is of no vital significance to them or to the world. If this were true, the history of education, which it is at times helpful to ignore for the sake of originality, would be simple and the study of the relation between education and social change would be meaningless. When public, universal elementary education was everywhere being urged a century ago, the argument which prevailed in all countries, aristocratic or democratic, monarchical or republican, was the plea for social reconstruction—"Open a school and close a jail"; the enrichment of the curriculum of the elementary school, which has everywhere taken place, was hardly promoted to keep society static. Countries which never anticipated the day of equal opportunity were all concerned even in the "static" nineteenth century with the training of "leaders," leaders not only of the masses but in social reconstruction. Those who would argue that such an education was static and not dynamic will have to explain how, despite this fact, society of today is so different from society of a hundred or fifty or even twenty-five years ago. They could, of course, answer that education was never looked upon as such a strong instrument of redirection as it may become today. But the fact is that despite the formal, lifeless content and authoritarian methods which have been so denounced, the world has moved. If education has not been used as a greater force for change, then there must be some social forces outside the school which inevitably limit its scope. These forces the advocates of education for the new social order are willing to ignore. For them it is sufficient to talk of a social plan, discreetly veiled in vagueness, and by repeating the new slogan often enough to foster the hope that the New Jerusalem is already built. Having broadcast one slogan for twenty years, the progressives have adroitly refrained from considering its consequences. It would, indeed, be inconvenient to be compelled to square the position recently assumed with that which is beginning to be discarded. But a social crisis is upon us and education must do something about it to show its vitality and the readiness of its leaders to meet new situations and to play their parts in life. Hence new slogans. Like Comenius, who also had a grandiose scheme for the reconstruction of humanity, the reformers are tired of the *puerilia illa toties nauseata.*

---

[1] For reply, see *Teachers College Record,* April 1933, pp. 539-551.

It is reasonable to inquire, however, whether in their analysis of the social crisis the progressives have discovered anything new. After all, not the progressives but their critics have protested for the last twenty years against the rampant individualism propagated by the new philosophy. It was not the progressives but their critics who protested against the philosophy of hedonism, the pain-pleasure or annoyance-satisfaction theory of education which has dominated educational thought for the past twenty years. And it was the critics and not the progressives who saw the weakness of an intellectual training built up wholly on S-R bond principles. The development of ideals, loyalty to convictions, found no place in the philosophy of the new education; discipline and effort went into the discard in an educational theory in which immediate satisfactions and returns were set up as guiding principles for individual growth. In building for a changing civilization and preparing for an unknown future, progressive philosophy had no room for tradition or standards since nothing must be fixed in advance or be set out to be learned. Life must be an adventure, life must be an exploration, but no maps must be supplied because they will be out of date tomorrow. Discarding the experience of the past, each individual must try out each situation for himself to see how it works—and what works is true, good, and beautiful; there may be room for authority but only the authority of individually tested knowledge—whether in arithmetic or morals, in spelling or literary taste.

Now the world is confronted with a social crisis and the causes of the crisis are individual selfishness and exploitation. The cynic may be pardoned if he seeks to prick the bubble of the new enthusiasm for social reconstruction by posing a few questions. What is the difference between individual selfishness and a philosophy which has been preaching the gospel of individual satisfactions as the mainspring of education and conduct, and which has made that which works synonymous with truth? What is the difference between exploitation and a philosophy which has found a moral sanction in the gospel of success, confirmed to the satisfaction of its exponents by a mechanistic psychology? Those who are loudest in denouncing the profit motive and the competitive spirit are fortunately able to forget that they ever propagated the theory that every child has the inherent right to ask, *"Cui bono?"*

Legitimate inquiry cannot stop here. Since the individual is the measure of all things and since moral standards must not be authoritarian or fixed in advance, is it unfair to connect this theory with the amount of crime and divorce in this country (even though the whole fault cannot be laid at the door of the school), with the decline of home life and changed relations between parents and children, with extravagance and reckless living, with "go-getting" and gullibility, with speculation and gambling on the unknown future, with corruption in government? Of course, it will be objected that this is a pioneer country populated by the worst elements from the most backward countries of the world; it is a country which has been dominated by the *laissez faire* doctrine and rugged individualism; it is a country in which the tempo of life and the rate of social change have been more accelerated than anywhere else in the world;—and all the rest of it. Even if these partial explanations are conceded, they do not justify the acceptance by educators of a philosophy which intensifies the worst features of American civilization—*laissez faire,* individualism, a pain-pleasure morality, self-expression, an effortless learning, and an avoidance of convictions and ideals. Growth may be accepted as an adequate aim of education but there must be a sense of direction; educators cannot be exonerated from the task of defining aims and goals. Nor can such a definition be formulated in terms of a changing civilization and still less of an unknown future. The chief weakness of American education is not merely the absence of moral and social purposes but the lack of a foundation in American life—a paradoxical statement perhaps, in the light of the pragmatic sanction of immediate needs and realities, but none the less true. The new philosophy, hitching its chariot to a changing civilization and an unknown future, has merely adopted what Van Wyck Brooke has called the "tradition of rootlessness," and the consequences which he ascribes to a rootless people threaten a rootless education. "A rootless people," he says, "cannot endure forever, and we shall pay in the end for our superficiality in ways more terrible than we can yet conceive. . . ."

Much will be gained for education if the lesson of the social crisis is really learned and if moral, social, and human values, instead of individual whims, caprices, needs, satisfactions, and annoyances, are made the basis of education. And the lesson may even carry over into content! That the advocates of the new social order see that a new emphasis must be placed on social and human values is clear, but at present they appear to be preoccupied only with the reorganization of economic life from which all other blessings will flow. Reorganize our economic life and men will have time to cultivate the nobler life. The times of prosperity and plenty before 1929 may be cited to prove that the task is not so simple as this. . . .

It would be foolish to attempt to deny the existence of the social crisis; it is equally foolish to proceed to harness the school to programs of amelioration on which the public has not only not reached a decision but on which it has not even begun to think, despite the ample opportunities provided during the recent political campaign. Educators undoubtedly have a duty in the crisis which is clear and indisputable, and that is to convince the public of the importance for social security of keeping the schools open as a going concern. To introduce into the educational program new social plans and new social orders, however logical and sound in theory, on which the public has not as yet made any pronouncement, would be to court a setback to the schools from which they would not recover in our generation. One point is clear; in analyzing the causes of the social crisis the progressives must honestly recognize the consequences of their own doctrines and concern themselves not with a new social order but with the removal of those causes of social disorder which were, until recently, inherent in their philosophy of education.

KANDEL, ISAAC L., in *Teachers College Record* (Vol. XXXIV, No. 5, February 1933, pp. 359-367).

487

Sweetness and Light

The pursuit of perfection then is the pursuit of sweetness and light. He who works for sweetness and light, works to make reason and the will of God prevail. He who works for machinery, he who works for hatred works only for confusion. Culture looks beyond machinery, culture hates hatred; culture has one great passion, the passion for sweetness and light. It has one even yet greater—the passion for man making them prevail. It is not satisfied till we all come to a perfect man; for it knows that the sweetness and light of the few must be imperfect until the raw and unkindled masses of humanity are touched with sweetness and light.

ARNOLD, MATTHEW, *Culture and Anarchy* (New York, Macmillan, 1883), p. 8.

488

Public Schools Manifest Democracy at Work

The public schools have a highly important part in the program of education for democracy. They, again, are manifestations of democracy at work. Their purpose is to organize the powers of communities and of states and to direct the cooperation of professional workers so that the young may be properly trained in the life of democracy. This function we must keep clearly in mind, abandoning our inadequate concepts of the school as existing to equip our children with certain useful tools of knowledge; it exists because democracy wills its existence in order that these on-coming members of the democracy may know its life, its ways, its ideals and may be quickened to carry forward its purposes.

COPE, HENRY F., *Education for Democracy* (New York, Macmillan, 1920), p. 103.

489

Four Marks of Education for Citizenship

A reasoned and coherent education for citizenship would be characterized by at least four marks. First, in the background there would be definite convictions as to what constitutes worthwhile living. These convictions would involve antithesis between real worths and pseudo-worths, and the schools would be against illusion as well as for truth in the field of values. . . .

In the second place, suffusing all guidance of pupils, the dominant interest would be definitely in socially shared values. . . . Therefore, our imagined system of schools for citizenship, though it will be guided by generous appreciation of many sorts of social weal, will bring to a special and definite focus the parts of the social weal with which the *state* directly concerns itself. . . .

This brings us to a fourth mark. With proper regard for gradation based upon pupil capacity, our ideal system will initiate young citizens into our unsolved problems—yes, into our conflicts and our defects also. When the schools deal with patriotism or citizenship "as such" or in general and not *ad hoc,* the result is vagueness. . . . Schools are the very place where we should make sure that our faults, and controverted questions of social weal and of state policy, are habitually discussed.

Coe, George A., *Educating for Citizenship* (New York, Scribner, 1932), pp. 12-14.

490

Education to Make Fit Voters

The theory of our government is—not that all men, however unfit, shall be voters,—but that every man, by the power of reason and the sense of duty shall become fit to be a voter. Education must bring the practice as nearly as possible to the theory. The whole land must be watered with streams of knowledge.

MANN, HORACE, *Life and Works* (Boston, Lee and Shepard, 1891), Vol. 2, p. 83.

491

What Is Culture?

A great deal is now said and written about culture,—indeed it is the educational cant of our time. What is culture, and how does it come? At its core, culture is not knowledge of the fine arts, or any other knowledge. It is not the ability to paint, draw, and sing. It is not drummed out of a piano, gathered by travel at home or in Europe, or skimmed from the surface of what is called "the best society." Cursory reading of polite literature does not bring it, nor does having one's own sweet will. I have now mentioned some valuable accomplishments and habits; but they are not culture. What, then, is it? I answer: At heart and in substance, culture is obedience,—physical, intellectual, and moral obedience.

He has physical culture whose body obeys his mind. He is a cultured soldier who, by long discipline, has learned his place in the machine of which he is a part, and who responds almost automatically to his commanding officer. He has a cultivated mind who is master of his faculties. Within his inevitable limitations, he holds his powers to any subject that he pleases. Neither his logic nor his imagination runs away with him. Now he reads, now observes, now reflects, now remembers, now indulges in flights of fancy. He may not be able to concentrate his thoughts on a single subject twenty-four hours, as Socrates did on one occasion, in entire oblivion of all that was passing; but he can do so for a reasonable period. He may be inferior to a multitude in the extent of his information, but he can quickly learn what he wants to know, because he controls his powers of acquisition. He does not need the interest of an engaging book or subject to call his mind into activity; it acts because he says it must act. If a member of Congress, he can read through a long bill in which he has no interest, if it is his duty; or if a teacher, he can spend an evening in correcting the boys' compositions, although a fascinating volume lie on his table. So he is cultured who governs his moral being,—who has brought the law that is in his members into captivity to the law of his mind. He stimulates his nobler powers, and puts a bridle on his passions. Many of his activities flow in the channel of impulse and spontaneity, but he rises at will to the kingship of his nature. And so in religion. Piety is not a mechanical doing of this and that: it moves in the field of free and sanctified spirit; and yet obedience to God is the very substance of religion. In its wide field, culture is human discipline, and not a matter of information, accomplishments, and suavity.

HINSDALE, BURKE A., *Schools and Studies* (Boston, Osgood, 1884), pp. 39-40.

492

Democracy and Human Rights

The United States were founded, not to provide free homes, but to assert human rights. . . . Nobody, no large bodies of men, in the time that the flag was first set up, believed with a very firm belief in the efficacy of democracy. . . . But we not only believed in it, we showed that our belief was well founded, and that a nation as powerful as any in the world could be erected upon the will of the people; that, indeed, there was a power in such a nation that dwelt in no other nation, unless also in that other nation the spirit of the people prevailed.

Democracy is the most difficult form of government, because it is the form under which you have to persuade the largest number of persons to do anything in particular. But I think we were the more pleased to undertake it because it is difficult. Anybody can do what is easy. We have shown that we could do what was hard, and the pride that ought to dwell in your hearts tonight is that you saw to it that that experiment was brought to the day of its triumphant demonstration. We now know and the world knows that the thing that we then undertook, rash as it seemed, has been practicable, and that we have set up in the world a government maintained and promoted by the general conscience and the general conviction. So I stand here not to welcome you to the Nation's Capital as if I were your host, but merely to welcome you to your own Capital, because I am, and am proud to be, your servant. I hope I shall catch, as I hope we shall all catch, from the spirit of this occasion a new consecration to the high duties of American citizenship.

Wilson, Woodrow, *Selected Literary and Political Papers and Addresses* (New York, Grosset & Dunlap, 1925), Vol. 1, pp. 128-129.

493

Training to the Limit of Mental Capacity

I have dwelt at some length on education and social control because to my mind these matters are of vital importance in a democracy, where the keynote must be happiness and contentment. In a military aristocracy education may not be so important, indeed it may be desirable to keep the masses in ignorance in order to emphasize their dependence upon their superiors; and where all are under the control of the ruling group, it is not so important perhaps to segregate the mental defectives from the other low levels of intelligence. But in a democracy every man is supposed to do his part. What this part is can only be determined by knowing his mental capacity and training him to the limit of that capacity.

Goddard, Henry H., *Human Efficiency and Levels of Intelligence* (Princeton, Princeton University Press, 1920), pp. 125-126.

494

The Individual and Society in a Democracy

Education in the United States should be guided by a clear conception of the meaning of democracy. It is the ideal of democracy that the individual and society may find fulfillment, each in the other. Democracy sanctions neither the exploitation of the individual by society, nor the disregard of the interests of society by the individual. More explicitly, the purpose of democracy is so to organize society that each member may develop his personality primarily through the activities designed for the well-being of his fellow members and of society as a whole. Consequently, education in a democracy, both within and without the school, should develop in each individual the knowledge, interests, ideals, habits, and powers whereby he will find his place and use that place to shape both himself and society towards ever nobler ends.

Cardinal Principles of Secondary Education (Washington, United States Bureau of Education, Bulletin No. 35, 1918), p. 9.

495

The True Ideal of Education in a Democracy

True education must begin and continue with a fine disregard of pecuniary returns. It must be catholic, genial, disinterested. Its object is to make the shoemaker go beyond his last—*"Sutor ultra crepidam"*—and the clerk beyond his desk, and the surveyor beyond his chain, and the lawyer beyond his brief, and the doctor beyond his prescription, and the preacher beyond his sermon.

Special training, with an eye fixed on some practical pursuit, works directly the other way, and against the interests of true democracy. It deepens the lines which separate men. It divides them into isolated trades which become close corporations, and into rival guilds which defend themselves by blocking all avenues of intercommunication.

But the right culture for a democracy is that which opens the avenues of mutual comprehension, and increases the common ground of humanity. It broadens and harmonizes men on the basis of that which belongs to all mankind. If it elevates certain persons above their fellows, it does not therefore separate them from the race, but joins them to it more broadly.

The right ideal of education in a democracy is the creative ideal. It does not seek to adorn men with certain rare accomplishments which shall be the marks of a Brahminical caste. It does not seek to train men for certain practical pursuits with an eye single to their own advantage. It seeks, by a vital culture, to create new men, and new kinds of men, who shall be of ever-increasing worth to the republic and to mankind. . . .

The educated man is a new man. It is not merely that he knows more. It is not merely that he can do more. There is something in him which was not there when his education began. And this something gives him a new relation to the past, of which it is the fruit, and to the future, of which it is the promise. It is of the nature of an original force which draws its energy from a new contact with the world and with mankind, and which distributes its power throughout life in all its channels.

This, it seems to me, is the real object and the right result of education; to create out of the raw stuff that is hidden in the boy a finer, stronger, broader, nobler type of man. . . .

The better manhood of which I speak as the aim of education is no vague and nebulous thing. . . . It has four definite marks: the power to see clearly, the power to imagine vividly, the power to think independently, and the power to will nobly. These are the objects that the creative ideal sets before us, and in so doing it gives us a standard for all educational effort, from the kindergarten to the university; a measure of what is desirable in old systems and of what is valuable in new theories; and a test of true success in teaching and learning.

Van Dyke, Henry, *Essays in Application* (New York, Scribner, 1905), pp. 228-232.

496

Mill on Liberty

Liberty is the one thing most essential to the right development of individuals and to the real grandeur of nations. It is a product of knowledge when knowledge advances in a healthy and regular manner; but if under certain unhappy circumstances it is opposed by what seems to be knowledge, then, in God's name, let knowledge perish and Liberty be preserved.

Liberty is not a means to an end, it is an end in itself. To secure it, to enlarge it, and to diffuse it, should be the main object of all social arrangements and of all political contrivances. None but a pedant or a tyrant can put science or literature in competition with it. Within certain limits, and very small limits too, it is the inalienable prerogative of man, of which no force of circumstances and no lapse of time can deprive him. He has no right to barter it away even from himself, still less from his children. It is the foundation of all self-respect, and without it the great doctrine of moral responsibility would degenerate into a lie and a juggle. It is a sacred deposit, and the love of it is a holy instinct engraven in our hearts. And if it could be shown that the tendency of advancing knowledge is to encroach upon it; if it could be proved that in the march of what we call civilization, the desire for liberty did necessarily decline, and the exercise of liberty become less frequent; if this could be made apparent, I for one should wish that the human race might halt in its career, and that we might recede step by step, so that the very trophies and memory of our glory should vanish, sooner than that men were bribed by their splendour to forget the sentiment of their own personal dignity.

MILL, JOHN STUART, *On Liberty* (London, Parker, 1859), pp. 99-100.

497

The Problems of a Democracy Will Be Centered in Its Schools

The most important group of problems in a democracy is to maintain and improve civic, social and industrial, domestic and community life.

The only organized effort possible is through education dominated by public schools.

Private and parochial schools may serve special needs and desires of parents or churches. They may even be useful in promoting the efficiency of the public schools, but they will never be antagonistic to civic, social or industrial, domestic or community advancement, permanently.

Public school standards will always dominate but never domineer in principles and methods.

Primarily the problems of a democracy will be centered in its schools.

The schools, day and evening, regular and special, will prepare the children and youth of every generation to make a better democracy than the country has ever had.

Education, public, private and parochial, will never, to any appreciable extent, demote any standards of civic, social or industrial, domestic or community life. They will never for long walk backwards, for no one ever goes where he is looking when he is walking backwards. The only excuse for democracy is the fact that it is looking forward and going forward.

Winship, A. E., "Educational Trails in American History," in the *Journal of Education* (Boston, December 2, 1929, p. 488).

498

The Aim of Democratic Education

The interpretation of education in a democracy brings before us another element in our philosophy, which was probably not so seriously considered during the earlier years of our federation. At that time citizenship was quite engrossed in nationalistic aims. This second factor is the need of adequately training every individual in the nation, and is quite as essential as the preservation and prosperity of democracy itself. To be democratic, education should endeavor to reach all and to furnish as far as possible equality of opportunity to all for their development. The aim of democracy is the provision of like advantages, and not of like possessions. Effort should be made to secure for each individual and each school group the chance to make the most of whatever possibilities are available in each case as the result of natural endowment and legitimate effort. Only thus can every one adequately serve the democratic society of which he is a member.

Graves, Frank Pierrepont, *The Administration of American Education* (New York, Macmillan, 1932), p. 611.

499

Democratic Government Demands an Educated People

Democratic government at least demands an educated people. For government of any sort requires authority; and authority attaches to a decision or a decree only when it has some definite, authentic will behind it. Plainly it is easier to secure singleness of aim and action with few rulers than with many. Hence a democratic community is sometimes apt to be hesitating in counsel or a prey to the dangers of inner dissension. Its safety in such a condition lies only in an educated community. Men may be reluctant to be persuaded of a truth; but it is the only thing of which in the long run they will be persuaded, or on which they will agree. Unanimity therefore, or that measure of harmony of mind and will which makes possible effective common action, depends upon the wide diffusion of a sense of truth and of the candor which will abide by the truth. It is a product of education and nothing else.

HETHERINGTON, HECTOR J. W., *Social Purpose* (New York, Macmillan, 1918), p. 208.

500

General State Education an Evil

That the whole or any large part of the education of the people should be in State hands, I go as far as anyone in deprecating. All that has been said of the importance of individuality of character, and diversity in opinions and modes of conduct, involves, as of the same unspeakable importance, diversity of education. A general State education is a mere contrivance for moulding people to be exactly like one another; and as the mould in which it cases them is that which pleases the predominant power in the government, whether this be a monarch, a priesthood, an aristocracy, or the majority of the existing generation, in proportion as it is efficient and successful, it establishes a despotism over the mind, leading by natural tendency to one over the body. An education established and controlled by the State, should only exist, if at all, as one among many competing experiments, carried on for the purpose of example and stimulus, to keep the others up to a certain standard of excellence.

MILL, JOHN STUART, *On Liberty* (London, Parker, 1859), p. 190 f.

501

The State and Education

In one field the state would seem at first sight to usurp the family function, the field, namely, of education. But such is not in reality the case. Education is the proper office of the state for two reasons, both of which come within the principles we have been discussing. Popular education is necessary for the preservation of those conditions of freedom, political and social, which are indispensable to free individual development. And, in the second place, no instrumentality less universal in its power and authority than government can secure popular education. In brief, in order to secure popular education the action of society as a whole is necessary; and popular education is indispensable to that equalization of the conditions of personal development which we have taken to be the proper object of society. Without popular education, moreover, no government which rests upon popular action can long endure: the people must be schooled in the knowledge, and if possible in the virtues, upon which the maintenance and success of free institutions depend. No free government can last in health if it lose hold of the traditions of its history, and in the public schools these traditions may be and should be sedulously preserved, carefully replanted in the thought and consciousness of each successive generation.

WILSON, WOODROW, *The State* (Boston, Heath, 1907), pp. 638-639.

502

The Environmental Influence of the State

The child comes into the world a bundle of undeveloped potentialities, void of experience and thought. The environment and external circumstances necessary for the growth of his mind and body are all supplied by the state. This is true, although not all nor even the chief part of them are imparted to the child directly by the officials of the government or by the laws or other organs of the state. The immediate environment depends on the influence of the family and of other institutions and agencies included in and controlled by the state. The child may have "Innate ideas" in the sense of that *a priori* element which is one of the prerequisites of all conscious existence; but the equally necessary *a posteriori* element can be got only from experience; and the sphere of the state, or of various parts of the state, is the only school where experience is possible for him. He is born into the commonwealth, and from the day of his birth the rights of citizenship, which he cannot actually enjoy till he has acquired full age, are held in trust for him by the state. It is true that it is the family whose influences at first surround him, molding his earliest tendencies and aspirations after its traditions, but the family itself would be empty of content except for what flows into it from society and the state. The community as a whole, then, is the environment of the individual. It is the state which fills him with its own ideas and molds him after its own pattern. The English youth grows up with habits and ideas quite absent in the Zulu or even in the Frenchman. Allowing all due claims for heredity—though this too has been indirectly supplied by the state through ancestors who were themselves its members—his environment has made him what he is.

The state then—using the word in its widest sense—puts its stamp on the young individual before he has reached manhood and acquired the ability to choose his own surroundings. Willingly or unwillingly, it educates the individual and so has a terrible responsibility thrust upon its shoulders. The young mind as well as the young body is thrown upon its care during the important and impressionable years fated to mold the development of an immortal soul for time and for eternity. This trust, burdensome and disquieting as it is, is yet one which the state dare not decline.

Its duty to the young cannot be brushed aside or lightly treated. But it has also a duty to itself. In each helpless child lies a future citizen who will form an organic portion of the commonwealth, and may exercise a deep and lasting influence on its destinies. All children cannot become great statesmen, but all great statesmen were once children.

On these two grounds the state has both a right and a duty to include the education of the young within its proper province. Indeed it must educate whether it will or no. The only question is whether it will do so consciously or unconsciously, systematically or at random, well or ill. Government need not undertake the work of education, but the supreme legislative sovereign is forced to assume some attitude towards that all-important question.

McKechnie, William S., *The State and the Individual* (Glasgow, MacLehose, 1896), pp. 363-364; (Present publisher —Jackson, Son & Co., Glasgow).

503

How Education "Functions" in Middletown

Some clue to these anomalies of the universal lauding of education but the disparagement of many of the particular things taught, and of the universal praise of the schools but the almost equally general apathy towards the people entrusted with the teaching, may be found in the disparity that exists at many points between the daily activities of Middletown adults and the things taught in the schools. Square root, algebra, French, the battles of the Civil War, the presidents of the United States before Grover Cleveland, the boundaries of the state of Arizona, whether Rangoon is on the Yangtze or Ganges or neither, the nature or location of the Japan Current, the ability to write compositions or to use semicolons, sonnets, free verse, and the Victorian novel—all these and many other things that constitute the core of education simply do not operate in life as Middletown adults live it. And yet, the world says education is important; and certainly educated men seem to have something that brings them to the top—just look at the way the college boys walked off with the commissions during the war. The upshot is, with Middletown reasoning thus, that a phenomenon common in human culture has appeared: a value divorced from current, tangible existence in the world all about men and largely without commerce with these concrete existential realities has become an ideal to which independent existence is attributed. Hence the anomaly of Middletown's regard for the symbol of education and its disregard for the concrete procedure of the school-room.

But the pressure and accidents of local life are prompting Middletown to lay hands upon its schools at certain points, as we have observed, and to use them instrumentally to foster patriotism, teach hand skills, and serve its needs in other ways. This change, again characteristically, is taking place not so much through the direct challenging of the old as through the setting up of new alternate procedures, e. g., the adding to the traditional high school, offering only a Latin and an English course in 1890, of ten complete alternate courses ranging all the way from shorthand to home economics and mechanical drafting. The indications seem to be that the optional newcomers may in time displace more and more of the traditional education and thus the training given the young will approach more nearly the methodically practical concerns of the group.

Lynd, R. S. and H. M., *Middletown* (New York, Harcourt, 1929), p. 221.

504

Social Arrangements Judged by Their Educative Effect

It was implied in our introductory survey of the social demands made upon education to-day that the democratic way of life is that in which the identity of interest of the individual and the social is best realized. The democratic faith is individual in that it asserts the claims of every individual to the opportunity for realization of potentialities unhampered by birth, family status, unequal legal restrictions, and external authority. By the same token it has been social in character. It has recognized that this end for individuals cannot be attained save through a particular type of political and legal institutions. Historically, conditions emphasized at first the negative phase of this principle: the overthrow of institutions that were autocratic. It is now seen that the positive side of the principle needs attention: namely, the extension of democracy to the creation of the kind of institutions that will effectively and constructively serve the development of *all* individuals. It is at once obvious that this extension affects economic, as well as legal and political, institutions.

Social arrangements are to be judged ultimately by their educative effect, by what they do in the way of liberating, organizing, integrating the capacities of men and women, boys and girls. These capacities include esthetic factors, those which lie at the basis of music, literature, painting, architecture in both production and appreciation; intellectual and scientific power and taste; capacities for friendship; and capacities for appropriation and control of natural materials and energies. It is the function of education to see to it that individuals are so trained as to be capable of entering into the heritage of these values which already exist, trained also in sensitiveness to the defects of what already exists and in ability to recreate and improve. But neither of these ends can be adequately accomplished unless people are trained to grasp and be concerned about the effect of social institutions upon individual capacities, and this not just in general but in discriminating detail.

Philosophy has two definite factual bases, one individual, the other institutional. Each base is susceptible of scientific study. Psychology can study the matter from the side of the individual, asking how this and that environmental condition, especially in the human environment, affects the powers of this and that person; how it calls out, strengthens, furthers, or weakens and retards this and that potentiality. Since education is a process of human interactions, while physiology and other subjects may supply material, adequate educational psychology must be a *social* psychology, not an impersonal one. Also are institutions and social arrangements to be studied factually and scientifically. The study becomes *educationally* significant only when it is extended to include how this and that social condition works causally to modify the experience and affect the character and capacity of individuals who come under its influence.

DEWEY, JOHN, and CHILDS, JOHN L., in *The Educational Frontier* (New York, Appleton, 1933), pp. 292-293.

505

Modern Educational Theories and Practical Considerations

The most salient characteristics of American educational theory have been summed up in four sentences by an Australian educator who spent several months in a nation-wide study of American schools: (1) "An experience which is not of immediate value to the child has no place in the schoolroom." (2) "All schoolroom situations should arise from the learner's felt need of the moment." (3) "The training (or disciplinary) value of a subject can no longer be used as a criterion in curriculum making." (4) "The walls between subjects must be broken down completely in order that the school work may be properly 'motivated.'" These are the ideals that the Australian visitor found to dominate the thinking of many of the teachers and educational leaders whom he interviewed. They can be expressed in such terms as pupil-initiative in place of teacher-planning; pupil experience not only as a basis for race-experience but as more significant than race-experience; immediate interest as more significant than adult needs; and freedom as a means of education rather than the attainment of freedom as an aim of education. That these are the ideals toward which school practice is being directed is shown clearly by the wide vogue of "activity programs" and "interest-unit plans." It is shown in the stigma that increasingly attaches to the systematic and orderly direction and pursuit of learning. A recent inquiry sent to the members of the National Society for the Study of Education, which is fairly representative of the leadership of our profession, indicates that two thirds of this membership are sympathetic toward these and related doctrines. More than one state department of education has virtually given to these and similar tenets an official sanction. And so an issue that has been a source of controversy for centuries seems likely to be settled now by official fiat.

In my opinion, American educational theory as I have defined it has an important but a quite limited field of application. Carried beyond this field, its results, I am confident, will be little short of disastrous. To be concrete, let me take the so-called activity programs. These, I believe, should dominate the earlier stages of education. I have held for many years, too, that throughout the elementary and secondary schools there should be abundant opportunities for the learner to follow the learning "leads" that his interests suggest. Fifteen years ago I called such opportunities "free-project periods." Next I called them "free-activity periods." Now I shall have to call them, I suppose, "free-areas-of-interest periods," and there will doubtless be another name for them next year—but they all mean the same thing.

Now, to recognize a limited place for free activities is one thing; to maintain that all learnings should be of this type is quite another; and it is the latter tenet that comes inevitably as a corollary from the fundamental premises of our dominant theory. This is nothing more or less than a downright negation of one of the most important human characteristics; the ability, namely, to work systematically and persistently in the face of immediate desire, interest or impulse. It is this capacity that has enabled mankind to climb upward from the plane of the savage and the brute. As Graham Wallas pointed out long ago, this ability has been a *sine qua non* of social evolution as contrasted with biological evolution. To attempt to nullify this factor, whether by official fiat or otherwise, suggests Huxley's famous epigram, "What has been ordained among the pre-historic Protozoa can not be altered by act of Parliament."

It is because this capacity for sustained effort is normally weak in young children that I believe our current theory to have a legitimate place in the earlier stages of education. I shall grant, too, that there are some unfortunate ones who never get beyond this stage; volitionally they never grow up, and for them activity programs and other appeals to immediate interest may be needed indefinitely. For normal children in the later pre-adolescent years, however, and throughout adolescence, the assumption that they can not and should not learn unless they have an immediate yearning for learning is not only an affront to their intelligence, it is a gratuitous denial of their grit, their courage—in short, their will-power. An educational theory which encourages the belief that there is no difference between the work attitude and the play attitude not only flies in the face of the plainest facts of experience, it is also charged with social dynamite. Of course many workers find their work fascinating, more fascinating sometimes than play, and most fascinating perhaps when, by effort and struggle, they have reached a high plane of endeavor. But to identify work and play under the same psychological rubric is fatal. I would maintain, furthermore, that the higher-order interests are attained in no other way than through an initial period of struggle—of effort to do initially uninteresting and sometimes distasteful things. An educational theory which says, not merely in effect but in so many words, "If you do not have an immediate interest in a task you are justified in evading it"—such a theory is about as debilitating in its probable influence as can be conceived. And yet it is just such a theory which has been weakening the fiber of American education for a generation and which is now being preached and, so far as possible, applied, in a most extreme form on a nation-wide front.

Our contemporary American educational theory of course is not new. Its most characteristic tenets were set forth in the seventeenth century by a group of European educators who, even at that remote day, very modestly dubbed themselves the "Progressives." The theory was given wide currency and effective expression by Rousseau. In the nineties of the last century it came out in sharp relief in a battle royal between the advocates of interest and the advocates of effort, and it was his classic attempt to integrate these opposing doctrines which first brought Mr. Dewey into prominence as an educational leader. It seemed at the time that Dewey's integration would solve the problem by combining on a higher level the valid and valuable elements in each doctrine. But the actual theory which came to dominate education and determine its ideals swung so far away from this solution that to-day the doctrine of interest is in sole possession of the field, and in a form far more extreme and sinister than ever before. Mr. Dewey's integration succeeded admirably in recognizing effort as an outcome of interest, but the basic fact that the interests which grow out of effort are unquestionably the highest and the worthiest of all interests has long been obscured. It is my contention that an educational theory which does not recognize this second factor is a limited theory and entirely inadequate; as a *sole* guide to practice, it is quite inadequate. . . .

I am not personally concerned with the practicability of our dominant American educational theory, but I do challenge its validity as a theory when applied beyond the limits that I have already named. I make this challenge on the following grounds:

(1) Its tenets regarding child-freedom are inconsistent with the plain biological implications of the greatly extended period of human immaturity which has clearly been a fundamental factor in human evolution and which derives its significance from the inescapable need of the human offspring for responsible support, control, direction, training, discipline and instruction on the part of the adult. To assume that children can grow normally without having this need met is to assume that natural laws can be transcended at the behest of human doctrinaires. Normal children crave direction and control.

(2) The tenets of the theory imply that freedom is a gift. In the history of the race, true freedom—whether freedom from personal thraldom or freedom from fear, fraud, want, superstition and error—true freedom has never been a gift but

always a conquest. In one way or another each generation must make this conquest for itself if it would be truly free.

(3) The tenets of the theory obviously lack virility. I do not mean that they are feminine; I mean rather that they are effeminate. They are weak in their very nature and enfeebling in their influence.

We come finally to one of the most amazing phenomena in the history of educational theory. As Dr. Kandel has recently pointed out, the group that has been urging most insistently pupil-freedom and the planless curriculum, the group that has held to a theory which deifies the individual and his free choices, is now the group that is most ardently advocating a planned economic order, a central control of industry and an abandonment of *laissez-faire*.

They can not find words that are strong enough when it comes to condemning individualism in the body politic; yet for a generation they have taught that education should follow the course dictated by the learner's individual interest. They protest against the profits motive in business and industry; but for a generation they have contended that every child should ask of every learning exercise, "What is there in it for me?" They protest against the sordidness of contemporary civilization, when the only criterion of truth that their basic philosophy has recognized is the test of narrow practicality, "Will it work?"

To judge by the closing of banks and the closing of schools, the present plight of our country is not matched in the civilized world. England and Canada have hard times, but the banks do not fail; and as for schools, Turkey, with all her poverty, opened in a single province 150 new schools last year and will open 150 more this year.

To-day the Progressives are shocked to look out on American society well-nigh wrecked on the rocks of individualism. But do they look back on their own teachings over the past two decades? Twenty years ago it was I who was declaiming against the evils of an excessive individualism. Just twenty years ago in addressing this department at the Philadelphia meeting I warned you of the dangers in an educational theory that even then threatened to compound rather than correct these evils—a theory that even then, as I have proved by duly documented evidence, was softening the fiber of American education. I have repeated the warning at intervals ever since. I have been both pitied by my friends and condemned by my enemies for persisting in this attitude, and whatever professional reputation I may once have had has dwindled with every reference that I have made to this problem. But even though my profession may persist in the pleasant pastime of chasing butterflies, I still maintain that I would rather be right than Progressive.

BAGLEY, WILLIAM C., in *School and Society* (New York, Science Press, 1933), Vol. 37, pp. 409-414.

CHAPTER XXII

Moral Life and Education

THE success of an individual depends to a greater extent upon what he is than upon what he knows. Knowledge is power for good or for evil, and therefore educators today recognize probably more fully than ever before the need of placing character-building first among the objectives of education. The writer believes in G. Stanley Hall's statement to the effect that education in the twentieth century must concern itself with the heart as much as education in the nineteenth century concerned itself with the head. Professor Dewey observes that "We frame our explicit aims in terms of some alteration to be brought about," and that therefore it happens "that a given epoch or generation tends to emphasize in its conscious projections just the things which it has least of in actual fact."[1] Surely the renewed emphasis upon moral aims in education during the past decade or more is evidence that something of serious importance is lacking in our social and national life.

The quotations in this chapter deal with the subject of character as a value of life and an aim in education. Eucken shows (509) that morality means a great deal more than action for the welfare of society, and that in the first place it is a matter of the man himself. Payne (511) reminds us of the fact that knowledge functions in conduct. Wood (536) emphasizes the sense of personal worth as a factor in our Western civilization. The student should read the entire chapter carefully, and note especially selections 512, 515, 516, 522, 532, and 537.

---

[1] *Democracy and Education,* p. 130.

506

The Vocation of Man

Eternal perfecting is the vocation of man.

Fichte's Popular Works (translated by Smith, William; London, Trübner, 1889), Vol. I, p. 156.

507

Sources of Happiness

Happy is he who carries a God within him, an ideal of beauty to which he is obedient—an ideal of Art, an ideal of Science, an ideal of the fatherland, an ideal of the virtues of the Gospel.

Pasteur, Louis (Inscription over his tomb).

508

Kant: Supreme Law of Pure Practical Reason

Act so that the maxims of your will may be in perfect harmony with a universal system of laws.

Watson, John, *Selections from Kant* (New York, Macmillan, 1894), p. 268.

509

Morality Means More than Action for the Welfare of Society

We perceive, accordingly, that the master-minds have not permitted the moral idea to suffer from any lack of courage, strength, and independence. Where then is the greatest true power: in our modern Romanticists with their expansive emotions and their self-persuasion of a great power, or in such heroes as we have considered, men like Plato, Luther, and Kant, who were far too conscious of the difficulty of their task to be boastfully aware of any superfluity of power, but whose true strength was proved by a great life-work? And these heroes, along with a common and immeasurably deep reverence for invisible laws, exhibit at the same time such an energetic development of individual character as completely to refute the objection that morality must produce men mechanically shaped after a pattern. At any rate we cannot feel hurt by being reckoned as pattern men, if we are in the company of Plato, Luther, and Kant!

At the same time, it becomes clear that, considered from the standpoint of such men, morality means a great deal more than action for the welfare of society, that in the first place it is a matter of the man himself, a compelling problem of his own being, a desire to overcome an unbearable inward schism and at the same time to establish a new basic relationship to reality. From such an inner necessity alone can there proceed an overpowering impulse and a joyful assurance of victory, this alone can give rise to the certainty of success in what seems incomprehensible, nay impossible. That the direction of morality towards society, in recent times, and especially in our own age, has brought with it a wealth of fruitful impulses can be at the same time fully recognized. But to place the ultimate basis of morality in the relationship to the social environment, is to deduce man's innermost being from without, to rob morality itself of its soul, and to let it dwindle into such a caricature that it necessarily provokes opposition, and gives the opponents of morality, in spite of their superficiality, an appearance of being in the right.

If we bear in mind the nature of genuine morality, as testified by the world-historical work, these attacks may with impunity be left on one side; they do not touch the centre of the matter in the very least. But although having so little significance in their own substance, they remain noteworthy as a symptom of difficult complications, as a sign of the insecure position of morality in present-day life as a whole.

History shows that the moral idea has ever afresh climbed to lofty summits; but it likewise shows that in between these periods of elevation there have been times of severe depression, and that each time the upward way has cost hard labour. It is obvious that in the case of a work of the purest inwardness, one age cannot work for another, one age cannot rest upon another. On the contrary, the matter remains all the while in a plastic state; ever afresh, morality must develop and demonstrate its truth, with original, spontaneous power; ever afresh it must demand the living decision, not only of the individual but also of the community. Present-day civilization, however, in spite of all its great achievements, has no inner solidarity of conviction, no thought-world which embraces the human soul, no dominating ideal of life. Accordingly, it cannot ground morality in the core of our being, nor give it a form corresponding to our stage of world-historical development and work.

We are face to face, at this point, with great tasks and difficult problems. For the time being, the broad current of the age, indifferent and callous, thrusts them aside. But their time will come, and it draws nearer in proportion as the individual begins to be personally sensitive to the emptiness of a civilization without a soul, and as men become clearly conscious of the disproportion between the feverish intensity of modern work and its yield of happiness and spiritual life. Times of lax and superficial morality have always been followed by periods of deepening and strengthening. And thus it will be in the future, as certainly as there rules in man's being a nature that cannot be destroyed, a nature that ever anew breaks victoriously forth through all the changes which time can bring.

Eucken, Rudolph, *Collected Essays* (New York, Scribner, 1914), pp. 70-71.

510

Moral Education Vital and Difficult

Moral education is the most vital and most difficult of all the problems of human culture. It is a problem, not for educators alone to solve, but for the whole nation. In a sense all education is moral, for the end of all teaching is to complete the moral growth of the child, and to impart to him the moral ideals of the race. No knowledge is merely for its own sake, but all must in some way affect conduct. All conduct, too, is in some sense moral conduct.

Moral education, therefore, cannot be compressed into a single formula, as though it were a training of some one emotion or habit. It must touch life at all points, recognizing that its work is to train a great force, which, as enthusiasm, can be turned into many different channels. Every institution must take part in this effort. Besides the school, we need many other agencies. We need a reformed theatre. We need gymnasia, holding up high ideals of physical perfection. Opportunity for an abundance of wholesome social life must be provided. The church must perform a more active part in moral control, and become more practical. We need, indeed, a synthesis of all the agencies that make for moral welfare, knowing that the problem is nothing less than that of conserving the most precious of our resources—the moral enthusiasm of the young.

Moral training must begin in early infancy. We must recognize the fact that physical hygiene is the basis of all later morality, and that the establishment of good habits of sleep, feeding, and the like is quite as much a part of moral education as anything that will follow. In many other ways the mother's early influence upon the child, her caresses, and the example of her emotions and temperament, contain possibilities both of good and evil for the child. She very early impresses strongly her type of behavior upon the infant.

Soon the question of obedience arises, and here another critical situation for all the child's future life appears. The child must be taught to make immediate and unfailing response to the demands of the parent. Reasons must not be given, but the child must be made to feel that he must obey simply because the parent wills it. The parent must be the infallible moral law, and his word be inexorable.

Partridge, George E., *Genetic Philosophy of Education* (New York, Macmillan, 1912), pp. 167-168.

511

Knowledge Functions in Conduct

Socrates identified knowledge and virtue, holding that, if a man does wrong, it is because he does not know the consequence of his proposed line of conduct. The latest of modern ethical doctrines is to the effect that the mere knowledge of what is right has but little effect on the doing of right; that conduct is determined mainly by habit; that ethical precept or ethical theory is of but little account; but that ethical practice confirmed into habits of right living is the only valid moral training. And, in matters other than ethical, it is now held that theories or ideas are comparatively impotent, but that experience or practice is the main essential. The difference between the ancient theory and the modern is almost world-wide, and in this instance we have a striking exemplification of the fact that human opinion oscillates from one extreme position to another, the periods of vibration sometimes being centuries. No one, nowadays, holds the extreme Socratic doctrine. It omitted to take account of habit or heredity, as well as of that atrophy of the will which is induced by intense emotion. The modern doctrine is equally partial and misleading; it obscures the potent influence of thought upon conduct, and exaggerates the empirical element in human training. The ancient doctrine is the nobler and the safer; and, as a matter of fact, it underlies most of the modern systems of ethical and professional instruction. In the sermon, in the Sabbath-school lesson, in the law-school, in the medical college, and even in schools of technology, the Socratic doctrine, in its main elements, still holds the right of eminent domain. In modern education it is a dominant idea, and is itself a curious proof of the potency of ideas. Our reformers insist that a theory of what is to be done is of very little account; but still they feel impelled to tell us that the old theory is wrong, and that their own theory is to be preferred. They invoke the potency of ideas to disprove the potency of ideas!

PAYNE, WILLIAM H., *Contributions to the Science of Education* (New York, American, 1886), pp. 161-163.

512

Conviction and Conduct

But indeed, Conviction, were it never so excellent, is worthless until it convert itself into Conduct. Nay, properly Conviction is not possible till then; inasmuch as all Speculation is by nature endless, formless, a vortex among vortices: only by a felt indubitable certainty of Experience does it find any center of Experience to revolve around, and so fashion itself into a system. Most true is it as a wise man teaches us, that "Doubt of any sort cannot be removed except by Action." On which ground, too, let him who gropes painfully in darkness or uncertain light, and prays vehemently that the dawn may ripen into day, lay this other precept well to heart, which to me was of invaluable service: *"Do the Duty which lies nearest thee,"* which thou knowest to be a Duty! Thy second Duty will already have become clearer.

May we not say, however, that the hour of Spiritual Enfranchisement is even thus: when your Ideal World, wherein the whole man has been dimly struggling and inexpressibly languishing to work, becomes revealed and thrown open; and you discover, with amazement enough, like the Lothario in *Wilhelm Meister*, that your "America is here or nowhere?" The Situation that has not its Duty, its Ideal, was never yet occupied by man. Yes, here in this poor, miserable, hampered, despicable Actual, wherein thou even now standest, here or nowhere is thy Ideal: work it out therefrom; and working, believe, live, be free. Fool! The ideal is in thyself, the impediment too is in thyself: Thy condition is but the stuff thou art to fashion that same Ideal out of! What matters whether such stuff be of this sort or that, so the Form thou give it be heroic, be poetic? O thou that pinest in the imprisonment of the Actual, and criest bitterly to the Gods for a kingdom wherein to rule and create, know this of a truth: the thing thou seekest is already with thee, "here or nowhere," couldst thou only see!

CARLYLE, THOMAS, *Sartor Resartus* (New York, Burt, no date), pp. 192-193.

513

Moral Beauty

Wherever right maintains a manful conflict with wrong; wherever the stout and brave arises for the defense of helplessness and innocence; wherever the martyr for freedom of intellect or conscience hurls defiance at his persecutors, or reveals a fortitude stronger than the fear of death; wherever friend sacrifices himself for the love of his friend; wherever the mother watches and waits in anxious vigils by her sick child's bedside; wherever the father, for his family's sake, welcomes the care and labor which waste his powers and sap his life-blood; wherever a stricken heart pours its libation of tears and rekindles a tender memory over the tomb of buried love,—in all these acts of blessed and beautiful human life we feel that there is drawn up from the deep susceptibilities of humanity something which is divine and infinitely beautiful.

WINCHELL, ALEXANDER, *Sparks From a Geologist's Hammer* (Chicago, Griggs, 1881), pp. 118-119.

514

Suggestions on Teaching Morals

What is it to teach morals in a school? It is to impart moral ideas to children's minds by words; and then, by exercise and example, to make those moral ideas become active principles, embodied in the life. The intellectual idea is first, as a cause; the good life is second, as an effect. . . .

Under the head of morals I include all the principles which should regulate the conduct of men; viz., justice, veracity, temperance, industry, chastity, economy, beneficence, love of truth, love of order, conscientiousness, obedience to law, obedience to parents, veneration of age, duties to brothers and sisters, duties to the young, the state, to the cause of light, liberty and love. . . .

I apprehend there are four ways or methods by which these moral principles may be taught in the schools of the United

States. Three of these modes are direct; one indirect. The indirect mode I will mention first; and it is through the family. . . . The second method of teaching morals in schools is by the voice and example of the teacher. This method is direct. The whole practical philosophy of the school system may be summed up in these eight words, "as is the Teacher, so is the School." . . .

The third practicable method of teaching morals in our public schools is by books. . . .

My fourth and last method is this: to introduce voluntary discussions on moral topics. The head master should preside over and direct them. . . . A book of debatable questions, embracing history, biography, government, domestic life, play, work, virtue, vice, etc., should be prepared with special reference to such a school exercise. If such a book does not exist, let the teacher give out such a question from his own mind as he knows to be fitted to his pupils.

Brooks, Reverend Charles, in *Barnard's American Journal of Education* (Vol. 1, 1856, pp. 336-342).

515

Philosophy of Life Related to Character

A wrong philosophy of life, implicit or explicit, is at the bottom of much bad character. Just to be thoughtless, or to be thoughtful in a jaundiced way, will make us a prey to evil. To take life thoughtlessly is all right for lower animals; for the higher animal we call man it is a forerunner of ineffectiveness and weakness. To get the wrong slant on life, to regard it as aimless and meaningless, or as blind and mechanistic, or as all fated and predestined, or as affording only physical thrills for venturesome joy-riders, or as worth while only for pleasure-lovers, or as just a selfish struggle for survival, or as rooted and grounded in materialism or individualism—all this kind of philosophy breeds a self-centeredness which is at the heart of all badness of character.

What do you think of the following philosophy of life? "What is a man worth?"

1. A man has enough fat to make seven bars of soap.
2. Enough iron for a medium-sized nail.
3. Enough sugar to fill a shaker.
4. Enough lime to whitewash a chicken coop.
5. Enough phosphorus to make 2,200 match-tips.
6. Enough magnesium for one medical dose.
7. Enough potassium to explode a toy cannon.
8. Enough sulphur to rid a dog of uninvited guests.
9. Enough water for a small-sized bath.
10. Enough salt to pickle a pound of pork.

Total drug-store value, $0.98.

Horne, Herman Harrell, *This New Education* (New York, Abingdon, 1931), pp. 183-184.

516

Moral Life in a Two-Storied House

We are all conscious of living our moral life, as it were, in a two-storied house. Downstairs goes on what has too evident a claim to the painful label: ordinary. Upstairs we have a different outlook and associate with better company. Not that our everyday routine should be called ordinary. Donatello was not ordinary when he walked home from market carrying his weekly provision of eggs in his apron. Otherwise his Florentine contemporaries would not have gazed at those eggs with so much interest. When Emily Brontë kept a German book open on the window-sill where she was preparing to beat the carpets she was not saved from being ordinary by the German book, but by the thoughts which would go on as she went through the dusty process. Does not Saint Augustine say that many people who seem to be outside the Church are actually in it and conversely? In the same way the thoughts which ought to be active in the drawing-room are sometimes relegated to the kitchen while Madame on her *chaise-longue* follows pretty trivial mental images. There is no truer saying than that intention is the soul of action.

We know perfectly well when and how we can be upstairs and when and how we linger downstairs. But it would be well if we would, every few days, look at some such chart as the following, drawn up, of course, by ourselves:

Downstairs	Upstairs
narrow ideas	silence
petty sentiments	solitude
small grievances	choosing one's company
small triumphs	indifference to trifles
egoism	reading with a purpose
conceit	studying great issues
self-praise	moral viewpoint in politics
gossip	
flattery	recreation in art
flirtations	intelligent travel
time-killing	love of nature
useless travelling	good music
frivolous week-ends	best plays
continuous radio	best books
tyrannical business	devotion to an idea
tyrannical details	devotion to a cause
vanity	self-reform for a cause
climbing	kindness
intriguing	forgiveness
pretence	patience
posing	real religion

Such a chart, referring to one's own—not to other people's—possibilities, would tell us at a glance on what story we happen to be. We can delude ourselves, of course: tired people—tired by overwork, by age or by success—easily think they have a right to lazing downstairs. On the other hand, over-sensitive people, accustomed by frequent self-defence to thinking themselves always in the right, will entertain no doubts that their whole life is spent upstairs. However, the attraction of nobility is so strong that it leaves no room for real insincerity. In some way or another we want to be aristocrats; we have no doubt in our heart of hearts that true felicity is inseparable from distinction, and when we enjoy cheap good times downstairs we never cease to be aware that there could be a different kind of happiness upstairs. But what makes distinction? The answer is written large around us. Look at the people whom your better judgment and higher aspirations rightly cause you to envy, you will find that they are distinguished in three ways: the superiority of their thoughts, their enjoyment of beauty, or their effort to raise themselves and others to a higher moral level. The magic spell which leads the world belongs to thinkers, to artists, to moralists and religionists. And what makes such people great also makes them enviable and happy. Whatever their outward circumstances may be, we know that their interior life can never be a failure. Michelangelo was ill-treated by the world, but only a man able to rise above disappointment could have written the sonnets to Vittoria Colonna. Read the letters, recently published, which poor Gauguin wrote from Tahiti; they are an endless wailing, sometimes a positive cursing of destiny. But when, at intervals, the painter speaks of his art, of some new inspiration which possessed him, instantly the dark page becomes illuminated by delight. We never hesitate about those things. A sure instinct guides us because there are in us two tendencies which seem inseparable and irrepressible: the longing to live happy and the dread of *DYING ORDINARY.*

Dimnet, Ernest, *What We Live By* (New York, Simon & Schuster, 1932), pp. xviii-xxi.

517

The Moral Life a Divine Discipline

In truth, the one method of morality is education, the passionate process of righteousness. And by education is meant not alone the process of childhood and youth, the teaching by which we try to bring to others the large realities of life, but still more that conscious, self-imposed process, as unending as existence itself, by which a man in earnest tries to see and to know. The moral life is a divine discipline, an escape from ignorance, a coming into knowledge. For morality grows out of the insight born of experience, is the child of wisdom. From this point of view, self-education is a moral duty of fundamental order; and no mode of life is permissible which does not come to us richly freighted with wisdom-giving experience.

Henderson, Charles H., *The Children of Good Fortune* (Boston, Houghton Mifflin, 1905), pp. 393 f.

518

Consistency in Moral Training

But whenever you do command, command with decision and consistency. If the case is one which really cannot be otherwise dealt with, then issue your fiat, and having issued it, never afterward swerve from it. Consider well beforehand what you are going to do; weigh all the consequences; think whether your firmness of purpose will be sufficient; and then, if you finally make the law, enforce it uniformly at whatever cost.

Let your penalties be like the penalties inflicted by inanimate nature—inevitable. The hot cinder burns a child the first time he seizes it; it burns him the second time; it burns him the third time; it burns him every time, and he very soon learns not to touch the hot cinder. If you are equally consistent—if the consequences which you tell your child will follow certain acts, follow with like uniformity, he will soon come to respect your laws as he does those of nature.

And this respect once established will prevent endless domestic evils. Of errors in education one of the worst is that of inconsistency. As in a community, crimes multiply when there is no certain administration of justice, so in a family, an immense increase of transgressions results from a hesitating or irregular infliction of penalties.

Spencer, Herbert, *Education* (Syracuse, Bardeen, 1894), pp. 216-217.

519

The Virtues of the Moral Life Can Be Taught

The children act as they have been taught or as society has let them teach themselves. Honesty, truthfulness, industry, and the other essential virtues of the moral life can be taught until they control so completely that men and women will not yield to any temptation to depart from the paths of moral rectitude.

ATHEARN, WALTER SCOTT, *Character Building in a Democracy* (New York, Macmillan, 1924), p. 32.

520

Character Education in a Changing World

The history of every society is marked by periods of relatively rapid and profound change. Such periods may be ushered in by the convulsions of great natural cataclysms, by the driving power of dominant personalities, by the varying fortunes of war, conquest, and migration, by the turbulent processes of social and political revolution, or by the peaceful advance of discovery, invention, science, and thought. But whatever may be their occasion or their cause, they are characterized by unrest, discord, and maladjustment. And before a new equilibrium can be established, the disturbances arising in one part of the social structure must run their complete course and produce the necessary modifications in both the material and the spiritual culture. The mores must undergo fundamental revision; new conceptions of right and wrong must be forged; and human character itself must assume unwonted forms.

While every generation is prone to regard its own age as beset with peculiar difficulties and fraught with unusual possibilities, the period in which we live may well be laying the foundations of a new age in the history of civilization. Indeed, not since man forsook the chase and turned his energies to the cultivation of the soil has he experienced such changes in his mode of life as those which he faces today. Speaking in a very broad and inclusive sense, one may say that man has lived through two civilizations—the first based upon the natural arts of hunting, fishing, and trapping; the other upon the laborious arts of agriculture, animal breeding, and handicrafts. In our time he is obviously entering a third civilization whose characteristics and outlines are still uncertain, but which may be called industrial—a civilization of science, technology, and machinery.

NATIONAL EDUCATION ASSOCIATION (Department of Superintendence), *Tenth Yearbook* (1932), p. 9.

521

The Child's Love of Play Deplored

Deploring the child's love of play and not comprehending its part in development, Watts writes:

"Cast a glance at the sports of children from five to fifteen years of age; what have all these little toys and fooleries in them that would be fit for young angels dressed in flesh and blood? Would so many years of early life have been wasted in such mean and trifling diversions by a race of holy and rational beings? And how much early iniquity and mischief in thought, word, and action is mingled with these sportings among the younger tribes of mankind God only knows."

BETTS, GEORGE HERBERT, *The Curriculum of Religious Education* (New York, Abingdon, 1924), p. 157.

522

In What a Moral Act Consists

If you are asked, "In what does a moral act consist when reduced to its simplest and most elementary form?" you can make only one reply. You can say that it consists in the effort of attention by which we hold fast to an idea which but for that effort of attention would be driven out of the mind by the other psychological tendencies that are there. To think, in short, is the secret of the will, just as it is the secret of memory.

This comes out very clearly in the kind of excuse which we most frequently hear from persons who find themselves confronted by the sinfulness or harmfulness of some part of their behavior. "I never thought," they say. "I never thought how mean the action was, I never thought of these abominable consequences." And what do we retort when they say this? We say: "Why didn't you think? What were you there for but to think?" And we read them a moral lecture on their irreflectiveness.

The hackneyed example of moral deliberation is the case of an habitual drunkard under temptation. He has made a resolve to reform, but he is now solicited again by the bottle. His moral triumph or failure literally consists in his finding the right name for the case. If he says that it is a case of not wasting good liquor already poured out, or a case of not being churlish and unsociable when in the midst of friends, or a case of learning something at last about a brand of whiskey which he never met before, or a case of celebrating a public holiday, or a case of stimulating himself to a more energetic resolve in favor of abstinence than any he has ever yet made, then he is lost. His choice of the wrong name seals his doom. But if, in spite of all the plausible good names with which his thirsty fancy so copiously furnishes him, he unwaveringly clings to the truer bad name, and apperceives the case as that of "being a drunkard, being a drunkard, being a drunkard," his feet are planted on the road to salvation. He saves himself by thinking rightly.

Thus are your pupils to be saved: first, by the stock of ideas with which you furnish them; second, by the amount of voluntary attention that they can exert in holding to the right ones, however unpalatable; and, third, by the several habits of acting definitely on these latter to which they have been successfully trained.

In all this the power of voluntarily attending is the point of the whole procedure. Just as a balance turns on its knife-edges, so on it our moral destiny turns. You remember that, when we were talking of the subject of attention, we discovered how much more intermittent and brief our acts of voluntary attention are than is commonly supposed. If they were all summed together, the time that they occupy would cover an almost incredibly small portion of our lives. But I also said, you will remember, that their brevity was not in proportion to their significance, and that I should return to the subject again. So I return to it now. It is not the mere size of a thing which constitutes its importance: it is its position in the organism to which it belongs. Our acts of voluntary attention, brief and fitful as they are, are nevertheless momentous and critical, determining us, as they do, to higher or lower destinies. The exercise of voluntary attention in the schoolroom must therefore be counted one of the most important points of training that takes place there; and the first-rate teacher, by the keenness of the remoter interests which he is able to awaken, will provide abundant opportunities for its occurrence.

James, William, *Talks to Teachers* (New York, Holt, 1912), pp. 186-189.

523

The Objective and the Subjective Part of Character

Our will activities result from ideas. Different masses of ideas give rise to different will action; hence the difficulty experienced in harmonizing and unifying the manifold acts of will.

The various groups of ideas do not simply succeed one another in consciousness; the relation of one to the other may also be that of apperception. Apperceiving attention is not confined to sense-perception; it embraces inner perception as well. The process of apperception, however, consists rarely or never in mere perceiving. It involves more: one mass of ideas exerts a determining influence on the other. Now, since each may be the source of will action, it happens that often one act of will accepts or rejects another. Again, conscious of himself preeminently as a being that wills, man gives commands to himself and decides concerning himself; he seeks to acquire self-control. In such efforts he makes himself more and more the object of his own observation. That part of his will activity which his self-observation reveals to be already in existence, we call the objective part of character. To the new will action, on the other hand, which first springs into existence in and with self-examination, we give the name subjective part of character.

The subjective side of character can attain its full development only during the years of maturity. Its beginnings, however, reach back into boyhood, and its normal growth during adolescence is noticeably rapid, due allowance being made for variations of kind and degree in different individuals.

Herbart, Johann F., *Outlines of Educational Doctrine* (translated by Lange; New York, Macmillan, 1904), pp. 146-147.

524

Moral Instruction and Moral Training

The subject of moral education can be reduced *prima facie* to a very simple formula: The moral educator makes the child a good man. Everyone, however, knows that these few and simple words cover a multitude of difficulties so overwhelming in their character and extent that up to the present time no system of moral education has been formulated having any claim to scientific exactness nor to widespread adoption. In fact, statistics in civilized lands make an almost tragic comment upon those institutions explicitly avowing their purpose to make good citizens, by showing an alarming increase in crime and a terrible percentage of adolescent criminals. Though children are born good, observation proves that something in our social system converts a large number of them into criminals before the age of twenty. Such facts should at least give us a more open ear to the whole problem of moral education.

. . . The concept good is anything but a simple or an easy term to use. . . . There is a clear demarcation between true morality and its allied species we have called social conduct. The distinction is made for both practical and logical purposes. It offers a basis for a plea against drumhead court-martials and summary executions of juvenile offenders against so-called moral laws. Secondly, it permits a clearly differentiated discussion of moral instruction and moral training, the two halves of moral education. The first endeavors to make an individual's intentions right; the second, to make his conduct social.

Holmes, Arthur, *Principles of Character Making* (Philadelphia, Lippincott, 1913), pp. 289-290.

525

Woe to the Ephesians!

The Ephesians would do well to hang themselves, every man of them, and to leave the city to beardless boys. For they banished Hermodorus, the best man of them all, declaring: We will have no best man among us; if there be any such, let him be so elsewhere and amongst other men.

Heraclitus, in Bakewell, Charles M., *Sourcebook in Ancient Philosophy* (New York, Scribner, 1907), p. 35.

526

Education Is Ethical in Aim

That education aims not at mere knowledge or mere power of any kind, but rather at knowledge and power put to right uses is fully recognized by the educational thought, though not by the popular opinion of the day. The advance movement in religious education takes its start, not in an educational atmosphere that is indifferent to the higher values of life, but in one that is already suffused with moral aspiration. Here and there, no doubt, a teacher entertains a contrary ideal of his work; probably the number of teachers who have not awakened to serious reflection upon the nature of their work is considerable; but certainly the general mass of those who do reflect will be found by any inquirer to occupy the ethical standpoint. Moreover, the ethical end is not thought of as a far-off culmination of one's education, but as an idea that is to be realized in every step of the educational process. The child is to grow continuously in the moral as in the intellectual life, and these two aspects of life are regarded as being properly inseparable. Every study is to contribute directly to the growth of the moral self. The school, in fact, now becomes a miniature society united by the ethical bond of regard for one another, and each task is wrought with an ethical purpose or inspiration as real as that of mature men in their respective callings.

Coe, George A., *Education in Religion and Morals* (Chicago, Revell, 1904), pp. 17-19.

527

Develop a Unified Moral Personality

Modern psychology has shown us how completely the mind is a unity, and that what we called faculties are merely aspects of its activity. So we must learn to recognize the unity of the moral life. We are educating not faculties, but children. The training of different aspects of the moral life must be subordinated to the development of the unified moral personality.

Therefore, the problem of moral education is the problem of the whole of education in relation to its moral centre and aim. Moral culture cannot be the function of any single influence or institution. The home, the school, the church, must all contribute; every instrument of education must be used with primary reference to the building of good character. Formerly there was much discussion as to whether moral culture was properly a function of the public school. The question becomes meaningless when we recognize that the influence of every phase of the school life and work can never be indifferent, but must count for good or evil, and therefore that it is our business to make it as good as possible. Moral culture is, then, not a phase or a part of education, but the directing and organizing of the whole process of culture so that it may end in forming happy and useful manhood and womanhood.

Griggs, Edward Howard, *Moral Education* (Croton-on-Hudson, Orchard Hill Press, 1903), p. 54.

528

The Test of Democratic Education

The test of democratic education passes beyond the intellectual to the moral. We look for certain kinds of persons from the schools.

Once we sought to make youth good by repression. In fact the only good child, of whose goodness we could feel assured, was the one laid away in the church-yard. Now we believe that the duty of society is to stimulate the child to express his whole life normally. Instead of lamenting that there are no good children we subscribe to the doctrine that there are no bad ones. Faith in natural depravity has waned and faith in growing lives takes its place. Education emphasizes development rather than discipline. It sees in children not only the society of the future time but society in the future tense, further along the road toward realized ideals. We no longer seek to force young lives into the set of molds of our present ways, ways that we know to be but sad compromises, after all. Rather we would face them forward; stimulate them to self-realization. We do not know what they may yet attain to, but this we do know, that above all besides, we crave for them riches and power in the realm of character.

Cope, Henry F., *Education for Democracy* (New York, Macmillan, 1920), pp. 155-156.

529

Daniel Webster on Character Building

If we work upon marble, it will perish; if we work upon brass, time will efface it; if we rear temples, they will crumble into dust; but if we work upon immortal souls, if we imbue them with principles, with the fear of God and love of fellow men, we engrave on those tablets something which brightens all eternity.

Cherry, Henry H., *Education the Basis of Democracy* (Boston, Heath, 1926), Frontispiece.

530

Nourish the Intellectual as Well as the Moral Nature

In affirming that the moral nature of man is the predominant element and should therefore be mainly consulted in the arrangements of school, I am very far from wishing that it should swallow up all the other instincts and faculties of man. It should be enthroned in his mind, but if it monopolize the man he is not yet sound, he does not yet know his wealth. He is in danger of becoming merely devout, and wearisome through the monotony of his thought. It is not less necessary that the intellectual and the active faculties should be nourished and matured. Let us apply to this subject the light of the same torch by which we have looked at all the phenomena of the time; the infinitude, namely, of every man. Everything teaches that.

EMERSON, RALPH WALDO, *Education* (Boston, Houghton Mifflin, 1909), pp. 11-12.

531

Teach the Meaning of Moral Practices

If character is to grow, the necessary practices must be guided by an understanding of their meaning. This requires an education in two directions—an increasing light upon the nature of one's choices, and a stock of ideals to inspire still better choices. We have already seen that hard tasks, otherwise disagreeable, are attacked the more cheerfully when the child appreciates what sense there is in doing them. Hence the values of an earnest, skillful, moral instruction designed to broaden and deepen the child's understanding of the excellence of right conduct.

The Child: His Nature and His Needs, a contribution of the Children's Foundation (O'Shea, editor; Valparaiso, Indiana, 1924), p. 100.

532

Principles in Educating Will

In this indirect education provide good models at all times, material and personal, for unconscious and conscious imitation. Children learn more from what we are than from what we say. We teach them more by our deeds than by our creeds.

Fill the mind with uplifting suggestions, with ideas and deeds so deftly presented that the following of them is effortless, while avoiding those suggestions that like poison rankle and spread in the system till all be contaminated. Suggestions that bear fruit touch such subjects as where to go, what to do, how and what to read, what to see and hear, with what and whom to associate, and the like, avoiding the while negative suggestions.

Form the right habits from the outset. Do the deeds one by one that mean the virtues. Only so can the virtues be formed. The virtues are an acquisition; they can be acquired only by doing the very deeds that flow from the virtues. To quote Aristotle, "It is by doing just acts that we become just, by doing temperate acts that we become temperate, and by doing brave deeds that we become brave." It is neither desirable nor necessary that the basis of habit should be reasoned into before the habits are formed. It is enough in all these efforts at the indirect education of the will that the questions of the child be answered as simply and intelligibly as possible without feeling constrained to raise ethical questionings of one's self. Morals are conduct; ethics the science of conduct; morals should precede ethics. He who is moral either understands ethics or can easily come to do so; he whose morals are not yet habits cannot intellectually realize ethics. To teach ethics systematically to children is likely to rub the bloom off of moral issues and to induce that precocity in the deep things of the spirit so disastrous everywhere in later years.

Use the object-lesson method in morals. Such instruction is to be occasional, as the suitable object-lesson arises, not systematic. The object-lesson justifies its use in moral as well as in any other type of instruction; it is concrete, simple, sensible, obvious, actual. Praise the good act when and where it occurred; say little about the bad act except as a rare warning. Praise is a great stimulus to children, indifference leaves them indifferent, and blame considerably hinders best work. The atmosphere of pleasure increases efficiency in every line. Perhaps all the virtues may be started through some appropriate object-lesson, if we will but watch for it: sanitation, cleanliness of body, hands, face, teeth, purity of thought, speech and act of courtesy, honor, chivalry, and respect for age. The happy use of the story in realizing the virtues concretely is closely associated with the object-lesson.

Suggest the power of the will. Particularly if you believe that it is a variable quantity, and not once for all fixed as each occasion for its use arises. Pupils often can, if they only will, and many times they can will. Effort is something to be put forth. You do not know what you can do in a new field till you really try, and try hard, and try long. Practice counts much in mastery. It is good to believe you can do what it is your duty to do; you will do better for believing in yourself. Auto-suggestion plays a large role in success; tell yourself that you can succeed, and make the necessary preparations for doing so. Not that by auto-suggestion we are to blind ourselves to our own limits, but that we may approximate our limits. No one knows in advance of the actual strain what he can really do.

HORNE, HERMAN HARRELL, *Idealism in Education* (New York, Macmillan, 1923), pp. 129-131.

533

Morality Is More than an External Code for the Conduct of Life

The fact that the definition of morality is in itself one of the most difficult of all problems, and one in regard to which there is the widest divergence of opinion, is not always sufficiently considered in the course of discussions on moral instruction. Were morality nothing more than the mere regulation of social intercourse, nothing more than an external code for the orderly conduct of life, it might not be difficult to dispose the young to its due observance, and with skill and success to break them into obedience to the rules.

If, however, morality is recognized as having a unique authority in shaping life's ideals, it presents to us the appearance of a pathway to a new world and to a new conception of life. It sets before us the apparently impossible task of escaping from the impulses and appetitions of our lower natures, while at the same time, preserving vigor in effort and the power of joy. It leads us to think of the true strength of a good life as something not mechanically determined, but springing from a deep source of moral freedom. Those to whom morality has this meaning trace back the power which makes for good living to sources in the secret places of the individual soul. Environment and external influences can indeed give help and impulse to a good living, but they cannot furnish the necessary motive power.

If this view of morality be accepted, it follows that limits are set to the sphere of moral instruction. If such instruction wears the mien of coercive authority, it may easily do harm more than good. If it relies too much on didactic disquisition, it may weary the pupil and thus dull the early freshness of his moral sense. On one point hinges its success; the pupil must be made to realize, so far as his natural disposition allows, the new world which is revealed through moral action. On the reality of that world he must be brought to rely. Its claims he must be inspired to revere and love.

This new world the pupil must learn to think of as transcending the influence of mere caprice; as demanding from us willing obedience and self-sacrifice, as being nearer than hands and feet, and as that which alone can give significance and true happiness to human life. Towards this high aim, training and instruction must work together. How the most diverse branches of the course of study can bear part in kindling and strengthening moral conviction has often been admirably shown. The more that a study is concerned with human life and progress, the more direct may be its moral influence. In this connection, history is of especial significance. But, in teaching it, we must not attempt to prove that in human history everything has gone smoothly forward in accordance with the dictates of morality, that Good is always victorious, that Evil is always overcome. Such a view would soon be refuted by the riper experience of our pupils. Our aim must rather be to show that moral principle has proved itself a force superior to all the shocks of outward fortune and that it has been able to give men assurance of their personal relationship to an unseen order of things.

Long-established tradition makes the first beginnings of direct instruction in moral principle the special concern of religion. For this power of religion, especially in the training of the younger children, it will be hard to find a substitute. Nevertheless, it is much to be desired that, in the upper classes of higher secondary schools, an effort should be made to supplement the religious and moral teaching which has gone before by a philosophical presentment of moral principles as deduced from human needs. What is wanted is not so much a course of formal lectures as a wise use of the opportunities which would present themselves in a course of lessons on great thinkers such as Plato, Epictetus, Shaftesbury and Kant. The need of such a course of instruction in the principles of morals is increased by the fact that doubt concerning the traditional forms of religious teaching lay hold of the minds even of the young.

For the purpose, however, of moral influence, training is much more important than instruction. But here too, more will be achieved by indirect methods, and when the teacher pursues his aim with caution and reticence. Nothing, however, compares in importance with the fact that moral aims and moral achievements should be rightly valued in the pupil's home and in the school community in which his education is carried forward. The pupil should always be treated as one who is called to the high task of a good life and to bearing of responsibility. As Plato and Aristotle urged long ago, the chief thing in education is that the young soul should learn with all its might to love good and to hate evil. The school, indeed, within its province can do much toward attaining this end. But let us never forget that it can only work efficiently in moral training when it is supported by the wider influence of the life of the whole community. Nowadays, we are far too prone to exaggerate the power of the direct influence of the school.

Sadler, Michael Ernest, *Moral Instruction and Training in Schools* (New York, Longmans, 1908), Vol. 1, pp. 3-6.

534

How a Good Character Is Formed

1. By having the native (that is, inborn) responses guided aright.
2. By the imitation of worthy examples.
3. By always having satisfaction attend right conduct.
4. By always having annoyance attend wrong responses.
5. By practicing the specific virtues desired.
6. By sharing common interests with others.
7. By acting in a way to give others proper pleasure.
8. By admiring those who have done right at a cost to themselves.
9. By being led to appreciate the beauty of the right.
10. By being led to see the ugliness of wrong.
11. By suggestions of the right kind from others or from oneself.
12. By reading good literature, good in both form and content.
13. By staying persistently in the presence of the good.
14. By never doing the first time anything you are unwilling to repeat.
15. By accustoming oneself to say "No" to one's wrong desires in the name of reason.
16. By moral thoughtfulness.
17. By a case-study of morals, that is, studying real instances of morality in action.
18. By acting in a way you would be willing for all men to act.
19. By thinking of the moral law as one true way to enrich life.

20. By controlling the course of one's thoughts, images, and ideas.
21. By cultivating the habit of putting oneself in another's place.
22. By accepting high ideals for oneself in preference to low ones.
23. By entertaining lofty conceptions of the meaning and value of human life.
24. By respecting the sense of right one has within him.
25. By sensing this voice of conscience, if we can, as for us the voice of God.

HORNE, HERMAN HARRELL, *This New Education* (New York, Abingdon, 1931), pp. 187-195.

535

Morality the Highest Aim of Education

Morality is universally acknowledged as the *highest* aim of humanity, and consequently of education. Whoever denies this can certainly have no true knowledge of what morality is; at least, he has no right to speak in this place. But to set up morality as the *whole* aim of humanity and education, an *expansion of the concept* (*i.e.* of morality) is required, as is also a proof of its necessary presumptions as conditions of its real possibility.

The *good will*—the steady resolution of a man to consider himself as an individual under the law which is universally binding—is the ordinary, and rightly the first thought which the word morality suggests. If we think of the power, and the resistance as well, with which a human being maintains this good will erect in himself against those movements of the emotions and desires working in opposition to it, then morality, which was merely an *attribute*, a *determination* of the will, becomes to us the virtue, power, action, and efficacy of the will so determined. Distinct from both is what belongs to legality, *i.e.* the right comprehension of the moral law, and different again from the knowledge of the general law, and even of the knowledge of ordinary and recognized rules of duty in common life, is the proper judgment by the individual of that which in special cases, in particular moments, in his immediate contact with human beings and destiny, is to be done, chosen, or avoided, as the best, as the true and only good. All this philosophy finds *immediately in the concept,* and expects, nay even requires it just as immediately from man as an expression of freedom. . . .

To the teacher morality is a *"taking place,"* a *natural event,* which we may assume has already been seen incidentally in isolated moments in a small part of his pupil's soul, but which should act and continue to act in the entire circuit of the character, and absorb and change into parts of itself all the remaining events, thoughts, imaginations, inclinations and desires. In such a perfect form as this, that natural event ought to take place, with the entire sum of the pupil's mental power; in the imperfect form in which it actually takes place, the good will has each time—or rather every act of good willing is—a defined sum of activity, a defined part of the whole, and indeed exists thus defined and in such a degree for the particular moment only. With time, however, the sum grows, diminishes, disappears, becomes negative (as in the case of a crooked line), grows again, and all this we can observe in so far as the pupil expresses himself openly.

In the entire determination with which this takes place, it does so of necessity as an inevitable effect of certain mental causes, just as necessarily as every effect in the material world, only not in any way according to material laws (*e. g.* of weight, impact, etc.), which latter have not the remotest similarity with those of mental operations. The teacher, like the astronomer, takes courage to attempt to investigate the conformity to law of the phenomena before him, by a right interrogation of nature and exact inferences sufficiently multiplied, and thus to discover likewise how they may be modified conformably to aim and plan. These realistic views do not tolerate the smallest mixture of the idealistic. Not the gentlest breath of transcendental freedom must be allowed to blow through ever so small a chink into the teacher's domain. If so, how is he to begin to deal with the lawless marvels of a being superior to natural laws, on whose assistance he cannot reckon, whose interruptions he can neither foresee nor prevent? Perhaps to provide opportunities—to remove hindrances? Was the absolute capacity then hindered after all? Are there then opportunities for it external to its own pure original beginning? Is then the intelligible again imprisoned within the mechanism of natural things? The philosophers, it is to be hoped, will remember their own concept better. Transcendental freedom neither can nor ought to allow itself to be met with in consciousness as an inner phenomenon. On the contrary, that freedom of choice which we all find in ourselves, which we honour as the most beautiful phenomenon in ourselves, and would fain exalt among the other phenomena of ourselves—this it is which the tutor strives to influence and firmly grasp.

"A making" which the pupil himself discovers when choosing the good and rejecting the bad—this or nothing is formation of character. This rise to self-conscious personality ought without doubt to take place in the mind of the pupil himself, and be completed through his own activity; it would be nonsense if the teacher desired to create the real essence of the power to do it, and to pour it into the soul of his pupil. But to place the power already existent and in its nature trustworthy under such conditions that it must infallibly and surely accomplish this rise—this it is which the teacher must look upon as possible, which to attain, to affect, to investigate, to forward, and to guide, he must regard as the great object of all his efforts.

Herbart, Johann F., *Science of Education* (translated by Felkin; Boston, Heath, 1895), pp. 57-61.

536

Christianity and the Sense of Personal Worth

At the heart of Western civilization, involved in all that is worth preserving in it, inspiring all that is genuinely progressive in it, is a distinctive sense of personal worth. This conviction of the value of personality is often described as individualistic, but this is the misunderstanding of its real character and implications. On it rest not only personal claims, but social obligations. It is better expressed in Mazzini's *Duties of Man* than in the individualism of the Social Contract, as interpreted by Locke or Rousseau. Respect for the personality and recognition of the claims of humanity upon oneself go hand in hand and are inseparable. This sense of personal worth issues in humanitarian sentiment as well as in individual self-respect.

It is, moreover, essentially Christian. Actually, in Europe, wherever this sense of personal worth obtains, it is the outcome of Christianity. As Loisy says, we derive our humanitarian feeling not from Greece and Rome, but from Jerusalem, from that very Jewish-Christian element in our civilization which impatient and ignorant humanists are so anxious to excise. The basis of this sense of personal worth is religious. Men are of infinite worth because God loves them, because Christ died for them. Deny the underlying religious faith, and it is doubtful whether any scientific truth or so-called rational principle can prop up this ethical standard. The French Revolution, by its rationalism, rendered its faith in humanity and progress irrational. . . .

In Europe, political and social systems that have ignored or defied the Christian ethic in the past have gone down, and they will go down in the future, however imposing may seem their temporary triumphs. The sense of personal worth, inspired by Christianity, works like a perpetual leaven in Westtern civilization. It has now been transferred to the East, and it works in India, challenging the oppression of the untouchables. The Christian ethic is not a waning force, not an effete idealism. It stands now on the threshold of new triumphs. . . .

If religion were mere illusion or the projection of human self-esteem, it could give no real power to that sense of personal worth which lies at the basis of the Labour movement and of Marxism. Marxism itself could only rise in a Christian culture. It does not cease to be the child of Christianity, because it ungratefully and indecently spends its energy in kicking its mother.

WOOD, HERBERT GEORGE, *Christianity and Communism* (New York, Round Table, 1933), pp. 7-10.

537

How to Make or Break Habits

The practical question next arises as to how habits may be forged or broken. It is already evident that it is easier to get them than to get rid of them, for in getting them the nervous system is virgin soil, while in getting rid of them the nervous system is like the underground of a big city. The consequence is that we usually keep the habits we get. The formation of right habits is vastly better than the reformation of bad habits. The answer to our practical question consists in observing five familiar maxims.

First, act on every opportunity. The set of the nervous system is given by deeds, not words. Better a single right act than a dozen resolutions to act rightly; in breaking a habit better a single refusal now than a dozen intentions to refuse next time.

Second, make a strong start. Well begun is here indeed half done. The vigorous initiative is like the first deep furrow through fallow land,—it may introduce a new system of drainage. To set forth without a stout heart is to invite failure.

Third, allow no exception. Consider each time that the whole issue is at stake. The exception is the storm that carries away from the foundation the inhibiting dam across the undesired brain path. The whole structure must be founded anew, with less likelihood of success than before.

Fourth, for the bad habit, substitute something good. To keep the mind on the good is easier than to keep it off the bad. The positive occupation, not the negative prohibition, must engross attention. Withdraw the mind from the ills we have by centering it on the goods we want.

And fifth, summoning all the man within, use effort of will. By these momentous words nothing more mysterious is meant here than listening attentively to the low whispers of duty in the midst of the storm in the soul, looking intently upon the shining face of goodness when wanton figures play among the shadows of the imagination, and laying hold upon some solid righteous thing when the soul grows faint and dizzy in the world's wild whirl.

Something of the sense of the importance of habit must have come upon us already as we have rehearsed together these familiar things about the patterns we are weaving into the web of life. A simple enumeration of what habit does for us will suffice to magnify its importance in our estimation. Without illustration it will be obvious how habit makes action accurate and speedy through the acquisition of skill and the simplification of movement; how it consequently diminishes fatigue and permits vaster accomplishments; how it mechanizes the essentials of survival, like walking, eating, dressing, talking, sleeping, working, and the rest, leaving the mind thus free for the solution of problems and the undertaking of the new tasks set for civilization; how it introduces the element of reliability into personal and social action, thus permitting cooperation in the world's work to continue, and incidentally the unscrupulous to fatten on the honest; and, finally, and most personally of all, how it fixes into firmness the character of a man and presents it to eternity. Unless the law of continuity fails, what a man shall be is the fulfilment of what he is now becoming. Destiny is the harvest of character; character is the summation of habit; habit is the repetition of deed; deed is the expression of thought; and thought is the spring of life. The far-off issue of life is out of the thoughts of the heart; keep then thy heart with all diligence.

HORNE, HERMAN HARRELL, *The Psychological Principles of Education* (New York, Macmillan, 1915), pp. 300-302.

CHAPTER XXIII

Religious Life and Education

THE material in this chapter deals with religion as a factor in education and life. The writer believes that this subject rightfully belongs to a comprehensive philosophy of education and that no philosophy of education is complete without it. The child has a religious nature just as truly as it has a social nature; the race has a religious heritage just as truly as it has a literary heritage. Nicholas Murray Butler writes: "The child is entitled to his scientific inheritance, to his literary inheritance, to his aesthetic inheritance, to his institutional inheritance, and to his religious inheritance. Without them he can not become a truly educated or a cultivated man." [1]

The author doubts whether the new humanism or any other form of merely ethical or social theory will ever provide moral dynamic adequate to guarantee the integrity and stability of individual, social, and national life. He is convinced, with the late President Wilson, that the world can not be saved materially unless it is redeemed spiritually. And spiritual redemption will probably come only through the power of genuine religion.

It is clear from the statement of Eddington (538) that scientific determinism leaves room for God. Horne states certain fundamental principles of religious education

---

[1] *The Meaning of Education*, p. 17.

(539). Athearn emphasizes the point that the church is responsible for religious education (540). Silver points out that science and religion are not rivals (541), and that religion has tested values (545). The quotation from Fosdick (571) reveals some of the consequences of materialistic naturalism. The student should read the entire chapter carefully and, in addition to the references indicated above, note especially selections 544, 551, 553, 554, 555, 566, 567, 570, 574, and 575.

538

Scientific Determinism Leaves Room for God

Let us suppose that on November 11th a visitor from another planet comes to the Earth in order to observe scientifically the phenomena occurring here. He is especially interested in the phenomena of sound, and at the moment he is occupied in observing the rise and fall of the roar of traffic in a great city. Suddenly the noise ceases, and for the space of two minutes there is the utmost stillness; then the roar begins again. Our visitor, seeking a scientific explanation of this, may perhaps recall that on another occasion he witnessed an apparently analogous phenomenon in the kindred study of light. It was full daylight, but there came a quick falling of darkness which lasted about two minutes, after which the light came back again. The latter occurrence (a total eclipse of the sun) has a well-known scientific explanation and can indeed be predicted many years in advance. I am assuming that the visitor is a competent scientist; and though he might at first be misled by the resemblance, he would soon find that the cessation of sound was a much more complicated phenomenon than the cessation of light. But there is nothing to suggest that it was outside the operation of the same kind of natural forces. There was no supernatural hushing of sound. The noise ceased because the traffic stopped; each car stopped because a brake applied the necessary friction; the brake was worked mechanically by a pedal; the pedal by a foot; the foot by a muscle; the muscle by mechanical or electrical impulses travelling along a nerve. The stranger may well believe that each motion has its physical antecedent cause which can be carried back as far as we please; and if the prediction of the two-minute silence on Armistice Day is not predictable like an eclipse of the sun, it is only because of the difficulty of dealing with the configurations of millions of particles instead of with a configuration of three astronomical bodies.

I do not myself think that the intermission of sound was predictable solely by physical laws. It might have been foreseen some days in advance if the visitor had access to the thoughts floating in human minds, but not from any study however detailed of the physical constituents of human brains. I think I am right in saying that within the last two years there has been a change in scientific ideas which makes this more likely than the old deterministic view. But here I am going to grant our visitor his claim; to concede that even human actions are predictable by a—possibly enlarged—scheme of physical law. What then? Shall we let our visitor go away convinced that he has gotten to the bottom of the phenomenon of Armistice Day? He understands perfectly why there is a two-minute silence; it is a natural and calculable result of the motion of a number of atoms and electrons following Maxwell's equations and the laws of conservation. It differs only from a similar optical event of a two-minute eclipse in being more complicated. Our visitor has apprehended the reality underlying the silence, so far as reality is a matter of atoms and electrons. But he is unaware that the silence has also a significance.

Often the best way to turn aside an attack is to concede it. The more complete the scientific explanation of the silence the more irrelevant that explanation becomes to our experience. When we assert that God is real, we are not restricted to a comparison with the reality of atoms and electrons. If God is as real as the shadow of the Great War on Armistice Day, need we seek further reason for making a place for God in our thoughts and lives? We shall not be concerned if the scientific explorer reports that he is perfectly satisfied that he has got to the bottom of things without having come across either.

EDDINGTON, ARTHUR S., *Science and the Unseen World* (New York, Macmillan, 1929), pp. 63-67.

539

Principles of Religious Education

In the first place, all truth is really God's truth. We feel this must be so when once we seriously face the question whether truth be a unity and so self-consistent, and so really the thought of God concerning reality. The truth which jesting Pilate sought was enfleshed before him, namely, God's thought of a man. The truth which the scientist seeks is embodied before him, namely, God's thought of a world. In man, in nature, the truth is the thought of God. This of course means utter justification for the common feeling that any least shred of truth found anywhere, in remotest star, in the solid earth, in a stirring emotion, or in a quieting thought, is sacred, having somewhat of divinity about it.

But truth is the ideal of the intellect, it is the object of science; and the quickening of the sense of truth, we saw, is the very aim of intellectual education. But if all truth is God's truth, then intellectual education ought to bring man to God as the source of truth, and itself becomes one of the indispensable agencies of religious education. It is gloriously possible for man to love God with his mind.

This principle forbids religious education to countenance the unwarranted distinction between scientific truth and religious truth. Truth is truth wherever found. It is the business of science to find the truth; it is the business of religion to claim that truth for God. That which science discovers it is the business of religion to appropriate. It is never the business of religion to deny scientific truth, to do so makes it ridiculous; it is never the business of science to deny that the truth is

God's, to do so makes it arrogant. Religious education appropriates intellectual education as its indispensable agent in bringing the intellect of man to God. And the teacher of the intellect is to handle the truth as the word of God; to do so is to be a religious teacher. Like Kepler, he must feel that a scientific discovery is a rethinking of the thought of God. . . .

As intellectual education seeks the knowledge of the truth, as emotional education seeks the feeling of beauty, as moral education seeks the volition of the good, so religious education seeks acquaintanceship with God. And God we now see to be the consciousness in which all human ideals are real. These conceptions enable us to take the next step and attempt to state the nature of religion. Fifth, then, as demanded by the preceding conceptions and as evidenced by observation of its phenomena anywhere, we may say, religion is the response of man as a unit to divinity. The unit includes his thinking, his feeling, and his acting. Man's religion is his thought about God, his feeling toward God, and his conduct in relationship to God. Man's thought about God is responsible for mythologies, cosmologies, faith, doctrine, creed, belief, etc.; his feeling toward God is responsible for his experiences of fear, awe, dependence, reverence, trust, humility, love, etc.; and his conduct in relationship to God is responsible for his ritual, ceremonies, sacrifices, and such action as his religion sanctions. Thus religion is not reducible to one of the elements of human nature as its basis, but writes itself large upon human life in its integrity. The psychologist finds no religious section in human nature,—religion is the whole human nature divinely related. From no hidden recess in the human constitution is God excluded, from no phase of human experience is God eliminable, in no remote part of man's environment, whether the cleft of the rock, the terebinth tree, the oaks of Mamre, the monitorial stars by night,—nowhere is it impossible to find Him who is All in All. This is not a vague pantheism, but the concretest theism; God is not an impersonal universal essence, but a personal individual consciousness, and religion is man's experience of God.

Horne, Herman Harrell, *The Psychological Principles of Education* (London, Macmillan, 1928), pp. 335-336, 340-341.

540

The Church Responsible for Religious Education

The state schools can aid in the battle against spiritual illiteracy by giving large place for ethical teaching in their curricula, and by arranging the time schedule of the schools in such a way as to enable the children in the public schools to attend week-day religious schools during the regular school day.

The *church* is threatened when the state develops keen intellects with a materialistic and pagan outlook upon life; the *state* is threatened when a large army of children and youth come to maturity without a moral foundation for citizenship. Therefore, a dual system of independent but closely coordinated schools is essential to the future of the democratic state and the free church.

The burden of the responsibility of religious education must fall, however, on the church. . . .

The removal of spiritual illiteracy will demand:

1. A crusade for religious education which will convict the church of the spiritual neglect of children and youth, and which will convince the nation of its dependence upon those spiritual forces without which social institutions cannot endure.
2. The organization and promotion of programs of religious education so that every child in the remote rural or mountain area, in the polyglot city settlements, in the comfortable residence districts, and in the exclusive circles of aristocracy and wealth may be reached.
3. A system of leadership training that would guarantee a trained religious teacher for every child in the nation.

An aroused church, a nation-wide program of religious education, and technically trained, professional leadership will not only remove the menace of spiritual illiteracy that now threatens the life of both church and state, but it will prevent the recurrence of spiritual illiteracy in the future.

ATHEARN, WALTER SCOTT, *Character Building in a Democracy* (New York, Macmillan, 1924), pp. 41-42.

541

Science and Religion Not Rivals

Science and religion are not rivals. They are each other's complement and man's binocular vision. In the past science frequently aided religion to correct its perspectives and religion has delivered science from the pitfalls of naturalism, materialistic monism and moral nihilism. It is only when one presumes to be the oracle at the other's shrine that confusion ensues. When the scientist from his laboratory, on the basis of alleged scientific knowledge presumes to issue pronouncements on God, on the origin and destiny of life, on the purposes of creation, and on man's place in the scheme of things, he is passing out worthless checks. The funds of his scientific data are utterly insufficient for such large orders. When the religionist delivers ultimatums to the scientist on the basis of certain hierarchic cosmologies embedded in his sacred texts or when he rummages about the store-rooms of geology, chemistry or biology for some scraps of sanction or some random affidavits to support his claim, he is a sorry spectacle indeed.

When religion, however, on the strength of its own postulates, speaks to men of God and the moral order of His universe, when it sets about unifying and ennobling human life by giving it a central motif, when it reaches down to the main springs of human conduct, which are our elemental wishes and desires, and sets about directing them into socially beneficent channels, when it utters its prophetic burden of justice and love and holiness and peace, then its voice is the voice of eternal spiritual truth, irrefutable and invincible.

The domain of religion is the personality of man and its eternal value to man is that through religious experience he can develop and enrich his personality.

RABBI SILVER, *Religion in a Changing World* (New York, Smith [Present publisher, Harper, New York], 1930), pp. 36-37.

542

The Religious Man Never Ceases to Labor for Others

The Love of his fellow-men reveals itself in the Religious Man, unalterably determined and for ever remaining the same, in this: that he never, under any condition, ceases to labour for their ennoblement, and consequently never, under any condition, gives up his Hope in them.

Fichte's Popular Works (translated by William Smith; London, Trübner, 1889), Vol. II, p. 474.

543

Christianity and Platonism

Christianity is as lofty as Platonism; but it gets its elevation by a different process. Instead of rising above drudgery and details, it lifts them up into a clearer atmosphere, where nothing is servile or menial which can glorify God or serve a fellow-man.

HYDE, WILLIAM DE WITT, *The Five Great Philosophies of Life* (New York, Macmillan, 1932), p. 282.

544

Religion Is Based on Experience

Religion is based, and, as it seems to me, real Christianity is based, on experience itself. That experience implies that our universe is no mere physical or biological universe, but a spiritual universe of values which can only be expressed as the active manifestation of personality in an indefinite or chaotic background. Our experience implies also that these values are no mere values for individual personality, so that within our apparent individual personalities is the unifying and all-embracing Personality of God. Realization of this gives us religion. Morality without religion leaves unanswered the question why we are impelled to strive for what is truer, better, and more beautiful. When religion is added, and we realize that God is present to us in our striving, we gain strength, courage, and inward peace, in spite of all our limitations and failures. It is from the inmost reality of our own being and that of our universe of experience that the striving comes, and that inmost reality is the manifestation of God. In so far as we are realizing that striving we are immortal and free, but not as mere individuals.

From this account of religion, and of what seems to me the essence of Christianity, it follows at once that Christian religion is a sham unless it is constantly lived in everyday life. There is no weekday world, and no external world, in which religion does not count. The everyday world is the spiritual world; and if we forget this we are wandering without guidance. It follows also that religion is its own reward. Neither hope of a future heaven, nor fear of a future hell, enters into it. We find the Kingdom of God within us, as Jesus taught; and it is no limited kingdom, but the universal and eternal Kingdom of God's activity. Religion enables us to face sin, sorrow, and death. We can walk among them with the assurance that God is present amidst them. We can also look back to the remotest past, forward to the remotest future, and outward to the remotest depth of space, and with the same assurance: for all of these belong to the universe of our experience. . . .

Whether my hearers belong to Churches or not, the point which I have tried to make in this short talk is the same. It is that the ordinary world which we see and feel around us is a spiritual world of values, in which we find the manifestation of God. We find it in our comradeship with others in the honest and diligent carrying out of our occupations, in our care for one another, in public services, and in our joint recognition and furtherance of truth and beauty. If we lose sight of this spiritual world we have lost sight of what is alone ultimately real in ourselves, and we are not realizing ourselves. Science by itself cannot guide us, since from its very nature it does not deal with the values which are supreme.

Science is not enough. Reason in its highest form as religion, and real religion, extending into every part of our lives, is what, as it seems to me, the world has most need of. Particularly is this so just now, with old theological beliefs, which to a large extent embodied religion, disintegrating in every direction, along with old scientific beliefs, as well as old political beliefs. What I have tried to put before you is an appeal for living and at the same time rational religion.

HALDANE, J. S., *Materialism* (New York, Harper, 1932), pp. 218-221.

545

Religion Has Tested Values

We can invent a machine today that will run thirty miles an hour and tomorrow one that will run sixty, and the next day one that will fly in the air instead of running on the ground. Such rhopalic, linear progression in technological skill and efficiency is possible in the material world but not in the artistic or spiritual world. Man began, as it were, but yesterday to investigate critically his physical world. Daily he is stumbling upon some new fact, some new law which hitherto was unknown to him. The modern scientist is like a child who suddenly finds himself in a new and marvelous toyshop. His eyes are wide open, his heart beats fast and his fingers itch to touch and try each single toy in the shop. But art and religion are very ancient enterprises of the human spirit. They have their cycles of growth and decay as well as their definite organic limits. They arise in the inner world of man, and man has known his inner world intimately for a very long time. Men have lived in societies for many thousands of years and long ago they were forced to face many of the social problems of organization and adjustment which we face today. A vast amount of social experience has already been accumulated. The best minds among the ancients wrestled with the problems of man's spiritual life as courageously as the best minds among the moderns. They faced as frankly as we do today the challenge of human destiny—of fate, of pain, of evil and of mortality. We have neither improved upon the manner in which they stated the problems of human existence nor upon the solutions which they offered. Little that is really new can be added to the basic inventory of religion and morality. Little can be added to the racial wisdom which crystallized itself through the ages in "Love thy neighbor as thyself" or "Justice, justice shalt thou pursue" or "Ye shall do no unrighteousness in judgment" or "Nation shall not lift up sword against nation."

We may discover a better technique for the realization of these maximum ideals, but we have nothing and can have nothing to add to their quintessential truth. Progress in this field consists not in discovery but in fulfillment. There can be no new Ten Commandments for no new Ten Commandments are necessary. They remain forever the digits of civilization.

The man of faith will not be discomfited either by the venerable character of his own truths or by the spick and span modernity and amazing prolixity of scientific achievements. When the great intoxication with scientific achievement will have passed, and man will discover how much of an aching void there still remains in his life, and how little mechanism and invention have contributed to his spiritual contentment and harmony of life, he will return humbly and contritely unto "the well which the princes digged, which the nobles of the people delved, with the sceptre and with their staves," his soul thirsting for God, for the living God.

RABBI SILVER, *Religion in a Changing World* (New York, Smith [Present publisher, Harper, New York], 1930), pp. 48-50.

546

Religious Education a Major Emphasis in the Church

We have come upon a time when religious education is becoming a major emphasis in the church. It would be unfortunate, however, if religious education should be set over against theology, missions or evangelism. It is not a substitute for any of these. It is a new method, a new instrument which the church will use in giving to the people the doctrine of the church, the missionary spirit and passion, and the evangelical fervor of the soul that has entered into fellowship with God. This new movement is building its own agencies and institutions. It is reconstructing theological seminaries and calling church colleges to a new recognition of their responsibilities to the church. It is building an educational program for the local church and the community and it has had the boldness to speak of a national system of religious education. But it has not come as a substitute for anything. It has not come to do away with the law; it has come to fulfill the law.

ATHEARN, WALTER SCOTT, *Character Building in a Democracy* (New York, Macmillan, 1924), p. 118 f.

547

The Church Must Organize Itself

Unless the church teaches religion it will not be taught. There is no other institutional agency at present that is either ready for or receptive toward this task.

The church must organize itself, and not something parallel to nor even within itself alone. The present situation demands, not a Sunday School, as one cog in many wheels of a church, nor even two or three special wheels called schools, but, first of all, the definite recognition that this is the task of the whole church that would rise out of that recognition. The greatest single need of religious education, as it is the most serious need of the churches, is a common, intelligent understanding by ministers and people of the fact that religious education is not an optional ornament for churches but that it is the most effective method by which the central task of the churches is accomplished.

COPE, HENRY F., *Organizing the Church School* (New York, Harper, 1929); p. 30.

548

Education Has a Religious Phase and Content

Among the innumerable definitions of education that have challenged human interest there is none of any value which does not suggest the possibility and need of teaching religion as a part of the great learning process. When we think of education in terms of unfolding the personal powers of the child, we cannot forget that child's capacity for religion, for reverent worship of God, and devoted service of humanity. When we speak of education as the introduction of control into experience, we cannot omit consideration of religion without neglecting the most powerful of all motives for self-control. When we speak of education as the acquisition of the social inheritance of the race, we must include the spiritual inheritance which religion contributes. From any viewpoint except that of the materialist, education is seen to have a religious phase and content. That is, education must be religious to be complete, which is simply saying we must teach religion as a vital part of human experience, or we leave education incomplete. If religion must be taught, then in some way or another it can be taught.

FISKE, GEORGE W., *Purpose in Teaching Religion* (New York, Abingdon, 1927), pp. 32-33.

549

Religion and Life

Religion must be given a place with morality, art, and knowledge as aspects of the spiritual environment of man; all four are different forms in which the creative activity of man manifests itself. Each is unique, but they are not mutually exclusive. Various attempts have been made to reduce one aspect to another. At different ages in the world's history, religion has dominated knowledge, art, and morality. Philosophically, the four categories may be regarded as different angles from which the Absolute is viewed; practically, they may be regarded as interwoven in the fabric of life; educationally, each may be regarded as an aspect of personality, and the principle of correlation in teaching demands—that for the full realization of any of them the others must not be neglected.

RUSK, ROBERT R., *Philosophical Bases of Education* (Boston, Houghton Mifflin, 1929), p. 108.

550

Meaning of Spirit and Religious Education

Too frequently religious education has been regarded as a thing apart, as a certain kind of education distinct from all others, or as the education of a certain section of the human nature distinct from other sections. Of course, this view of religious education belongs logically with a certain view of religion; namely, as something apart from the ordinary and usual life and interests of man, or as something foreign that has to be grafted into his unreligious nature. The inclusion of the discussion of religious education in a book of this kind is intended as a protest against all this way of regarding religious education and religion. Rather is religious education the natural and logical conclusion of all education, just as religion is the natural and complete expression of man's being.

And the spirit whose education we now undertake is not a mysterious and inaccessible entity within us, nor a part even of our accessible being, nor least of all a foreign element introduced into man by religion; it is simply and clearly the whole consciousness in its relation to deity. The education whose procedure we have so far been following has dealt with certain elements in the spirit of man; the education whose nature we now begin to consider unites these elements in the conscious spirit of man and directs that spirit to its home in God. By the spirit we mean, then, mind in relation to deity, and by educating the spirit, or religious education, we mean bringing man in his integrity into right relationship with God.

HORNE, HERMAN HARRELL, *The Psychological Principles of Education* (New York, Macmillan, 1915), pp. 333-334.

551

The Three Stages of Thought

A person may wear his religion on Sabbath days, and put it off on week days, possibly. But his view-of-the-world shows itself in all that he does. All things take on a different appearance when viewed by the light of the reason. For reason is insight; it "sees all things in God," as Malebranche expressed it. For it looks at each thing to discover in it the purpose of the whole universe. To see the whole in the part is justly esteemed characteristic of divine intelligence.—The oft-asserted ability of great men of science—that of Cuvier to see the whole animal in a single bone of its skeleton—that of Lyell to read the history of the Glacial period in a pebble—that of Agassiz to recognize the whole fish by one of its scales—that of Asa Gray to see all botany in a single plant—these are indications of the arrival at the third stage of knowing on the part of scientific men within their departments. Goethe's Homunculus, in the second part of Faust, symbolizes this power of insight which within a limited sphere (its bottle!) is able to recognize the whole in each fragment.—The spirit of specialization in our time aims to exhaust one by one the provinces of investigation with a view to acquire this power to see totalities. This is what Plato meant by describing this third stage of thinking as a power of knowing-by-wholes (totalities). Learn to comprehend each thing in its entire history: this is the maxim of science guided by the reason. Always bear in mind that self-activity is the ultimate reality—all dependent being is a fragment, the totality is self-active. The things of the world all have their explanation in the manifestation of self-activity. All is for the development of individuality and ultimate free union of souls in the kingdom of God.—To sum up: The lowest thinking activity inventories things but neglects relations; the middle stage of thinking inventories relations, forces, and processes, and sees things in their essences, but neglects self-relation or totality; the highest stage of thinking knows that all independent being has the form of life or mind, and that the absolute is a person; it studies all things to discern traces of the creative energy which is the form of the totality. The theory of evolution rightly comprehended as the movement of all things in time and space toward the development of individuality—that is to say, toward a more perfect manifestation or reflection of the Creator, who is above time and space—this theory is, properly understood, the theory of reason. The theory of gravitation, as a world-view, on the other hand, is that of the understanding.

HARRIS, WILLIAM T., *Psychologic Foundations of Education* (New York, Appleton, 1898), pp. 36-37.

552

Religion in English Public Schools

I went into school-work with the notion that great alterations might profitably be made in the subjects usually taught and in the way of teaching them. I am now fully convinced of this. What for instance is the present state of religious education? It is strange that while people are very keen as to the religious education of the poor, so that nothing can be done because of differences about the "religious element," this religious element is hardly thought of in the education of the rich, and nobody knows or cares or even thinks about it when a son is sent to Eton, Harrow or Winchester. The religious element certainly entered into the education of the Fourth Form when I was at Harrow, but how? In the shape of one lesson a week from Watts's *Scripture History*. And maybe the fathers of some of us were then offering the strongest opposition to all schemes of secular education and believing most firmly that such schemes end in infidelity and all sorts of immorality. Was the weekly lesson in Watts the salt that kept all the rest of our intellectual food wholesome for us? In all the other public schools I have known, the religious teaching has been nearly as scant as at Harrow in the forties. Even in the National Schools where there is so much fuss about it, all the talk ends in the children having to learn by heart the Church Catechism and use the Bible as a reading-book. In this matter we differ very widely from the Germans. All their classes have a religious lesson every day, the younger children in the German Bible, the elder in Greek Testament and Church History, and in both cases great pains are taken to give them accurate instruction in the Gospel according to Martin Luther. Yet the effect of all this systematic religious teaching, as far as my observation goes, is small. The educated classes in Germany, whether more or less moral than the corresponding classes in England, are far more consciously estranged from Christianity. With me then it is an open question in what way and to what extent grown-up people are bound to study theology themselves and to procure instruction in it for their children. One point is clear, that the first thing to cultivate in the young is reverence, and reverence is surely in danger if you take a class in "Religion" just as you take a class in Grammar. No good, I think, can come of connecting sacred truths and persons with associations so disagreeable to a schoolboy as ordinary school-work. Above all things I object to the plan of making the Greek Testament succeed or supersede the Greek Delectus. Emerson says somewhere that to the poet, the saint and the philosopher all distinction of sacred and profane ceases to exist. All things become sacred alike. As the schoolboy, however, does not as yet belong to any of these classes, if the distinction ceases to exist for him all things will become profane alike, and there is great danger of this if the words of our Lord are dwelt upon chiefly as illustrations of the rules of Greek accidence.

QUICK, R. H., *Life and Remains* (Storr, F., editor; New York, Macmillan, 1899), pp. 13-14.

553

The Consequences of Principles

In the development of the consequences of a religious principle, or of any general principles, it does not signify whether this or that person is conscious of it. Few are conscious of principles, theoretically—i. e., few see all or even many of the logical results that follow their application—but each one touches its application on some one side of it, and on the whole the nation or people will in a series of years draw out of a dogma every one of its implied conclusions. If the absolute is held to be an unconscious unity, all particular individuality, all immortality for particular men, and all freedom of political institutions, will ultimately go to the ground among the people whose priesthood hold that doctrine. If the absolute is held to be a conscious person, quite a different history will result, and everything will be favourable to the development of the individual, through education, into the type or image of the absolute self-conscious person.

Harris, William T., *Psychologic Foundations of Education* (New York, Appleton, 1898), p. 269.

554

The Permanent and Unchanging in Creative Christian Education

It should be clear already that creative Christian education is not a flighty, arbitrary, or history-spurning thing; that it does not dispense with self-discipline, nor dissolve the bonds that hold men together. On the face of the matter, the personality-principle calls for self-organization, for the integration of selves in society, and for a kind of interrelation between persons that can hold through time. It may be well, however, at this stage of our discussion, to formulate this abiding aspect of free creativity so that teachers may test and guide their work in a definite manner.

Two maxims will sum up the matter: Approach all persons in the spirit of respect or ethical love; approach all facts in the spirit of science. These are two aspects of one principle, however, rather than two principles. For, since the scientific method, as we have seen, is a necessary expression of personality, ethical love, which seeks the self-realization of persons, will directly evoke scientific attitudes and practices in both the lover and the loved.

For teachers of the Christian religion the universal guide and test is, Am I helping my pupils grow in the personal or ethical-love way of dealing both with themselves and with others whose lives they touch? Am I helping them extend this fellowship to others who need it? Am I helping them master the conditions of efficient good-will by using the methods of science with reference to all facts involved, whether facts of history, of external nature, or of the mind of man?

Am I helping them to such a deep and satisfying experience of this ethical-love way that they are learning to worship?

This single, yet two-fold, principle will find no occasion to revise itself, no matter what changes in other matters may be required. The particular acts in which we endeavor to love one another will vary with varying conditions and with growing insight; likewise the particular technics by which we learn and teach will grow and proliferate in the future as they have done in the past. We do not know what forms the self-realization of persons might take under circumstances that seem not to be entirely beyond the range of possibility. If we could feed ourselves with synthetic foods, or tap some exhaustless cosmic reservoir of electric power, or "crack the atom," what would daily occupations then be like, and how would the forms of human association be affected? Nobody can tell. But the loving approach to persons, and the scientific approach to facts, would have precisely the sanction that they now have.

This permanent element in Christian education is not a dogma; rather, it supersedes dogmatic authority. It is not a metaphysical proposition, though it may well furnish an impulse and a starting-point for metaphysical inquiry. It does not prescribe any particular act as a duty, though duties enough must sprout from it. It is an attitude or a policy, and in this sense a method, or determinant and test of procedure. Further, as we have just seen, it is what logicians have called a heuristic principle, that is, a way of acting that leads to discoveries. It has indefinite fecundity and creativeness because it makes us active to the limit of our personal capacity without imposing upon us any act whatever.

Coe, George A., *What Is Christian Education?* (New York, Scribner, 1929), pp. 178-179.

555

Physical Science a Limited Body of Truth

Analysis shows that physical science presupposes logic and mathematics; or, that physical reality is complex, and decomposable into more simple terms and relations. Physical science has to do, furthermore, with *certain features* of physical reality. It describes the quantitative constancies exhibited by physical change. And there are other features exhibited even by bodies; such, for example, as their control, in the case of living bodies, by desire and will. Thus, being is neither physical in substance nor is it exclusively mechanical in behavior. Logic is prior to physics, in the sense that it has to do with more elementary forms of being; and ethics is at least correlative with physics, since what it describes is as truly found in the world as that which physics describes. And logic and ethics, taken together with other equally unimpeachable branches of philosophy, not only disprove the generalizations of naturalism, but afford a basis for religious belief.

Perry, Ralph Barton, *Present Philosophical Tendencies* (New York, Longmans, 1929), pp. 108-109.

556

Education Without Religion

Education without religion makes cold, calculating men, with self-centered interests, and any system of social advance which leaves out the religious side of nature leaves out the one force that makes possible lasting organization upon which civilization depends.

Conn, Herbert W., *Social Heredity and Social Evolution* (New York, Abingdon, 1914), p. 343.

557

The Normal Man Believes in God

Education in religion is of the utmost importance. It is not to be made the object of either suspicion or ridicule. The normal man is not an atheist. The normal man believes in God, at least in a god which may be spelled with a small "g." He believes in a power above himself which may be either personal or impersonal but it is a power in which he lives and moves and has his being. Religion belongs to a man as man, and therefore belongs to the child as child. Properly interpreted and applied, it is the most formative of all educative forces. It helps to determine destiny.

THWING, CHARLES F., *What Education Has the Most Worth?* (New York, Macmillan, 1924), p. 69.

558

Religion and Education Can Not Be Separated

The ideal of religious education is the development of the highest form of individual character which is to be interpreted in terms of unselfish service for God and mankind. . . .

In theory, religion and education may be separated from each other, but in reality such a thought is impossible. The aim and goal of education and religion are virtually the same. The basis for true education is religion, and any effort to make education independent of religion, narrows its scope, aim, and goal. True education seeks to develop the whole personality. This is the ideal which education must ever have before it and to which it must tenaciously hold. The religious ideal is also concerned in the whole personality. Every volitional, emotional, and intellectual tendency is touched, developed, and brought to the highest possible form.

HEATHCOTE, CHARLES W., *The Essentials of Religious Education* (Boston, Sherman, French, 1916), pp. 6-8.

559

Children Have a Religious Nature

The main thing for us as students of child psychology to bear in mind is that children have a religious nature. To ignore it is to deprive them of some of their inheritance—after all, the most important part. But the fact that children have, by original nature, a religious impulse, is no reason to suppose that they will grow up religious, or that they will necessarily have any conscious religious experience or realization of God. This tendency needs development, pruning, directing, feeding, just as any other does. All children have the kindly instinct, yet how many brutes there are, and how many more are never rationally moral. . . . Much and careful training is necessary before a child grows up into a truly religious adult.

NORSWORTHY, NAOMI, and WHITLEY, MARY T., *The Psychology of Childhood* (New York, Macmillan, 1922), p. 235; Revised Edition (1933), pp. 355-356.

560

Schools Traceable to Religious Influences

It is religion that has furnished the strongest support of morals and cherished the loftiest ideals of life.

The schools of the modern world, with their surpassing excellence and many-sided activities, are directly traceable to religious influences.

PAINTER, FRANKLIN V. N., *History of Education* (New York, Appleton, 1912), pp. 2-3.

561

Living Truths of the Bible

Only as the living truths of the Bible are built afresh into the spiritual lives of each new generation, will the church prosper and Christianity fulfill its function in individual life and social organization.

BETTS, GEORGE H., and HAWTHORNE, MARION O., *Method in Teaching Religion* (New York, Abingdon, 1925), p. 144.

562

Objections to Rousseau's Theory on Teaching Religion

Rousseau urged that, previous to his sixteenth year, the child should receive no formal religious instruction whatever. He gave as a reason that before such time the child would misconceive and distort all religious ideas that were presented to him. "Let us refrain," he says, "from announcing the truth to those who are not in a condition to understand it, for this is equivalent to substituting error for it. It would be much better to have no idea of the Divinity, than to have ideas which are low, fanciful, wrongful, or unworthy of Him." Now it is impossible to deny that the young child is as superstitious as a savage, or that he is a natural idolator. But there are two objections to Rousseau's reasoning. The first is that you cannot keep the child away from religion if you would. His imagination, working on the mysteries about him, will create its own Olympus or Asgard. Still further, no matter how long religious teaching may be deferred, error and distortion of views cannot be avoided. Every man is for a time a devotee of superstition; he may pass out of it into a rational religion, he may fall into mere negation or no religion, or he may remain superstitious, as most men do in some degree, to the end of his life. Accordingly, the ideal is not a denial of religious instruction, but such instruction wisely administered.

HINSDALE, BURKE A., *Studies in Education* (New York, American, 1906), pp. 235-236.

563

Physical Science Need Not Fear Religious Thought

Physical science is certainly wrong in turning away altogether from the aesthetic and religious regions of thought which are customarily regarded as affording a higher view of things. It fears—needlessly—that its sharply defined notions and its solid fabric of method would be disturbed by the admission of elements which—being themselves incalculable—would necessarily communicate their own indefiniteness and mistiness to all that comes into contact with them; and it forgets that its own fundamental elements, the ideas of forces and natural laws, are not the ultimate components of the threads that weave the texture of reality. On the contrary, when we exercise keener insight, they too lead us back to the same supersensuous region of which we can not compass the boundaries.

LOTZE, HERMAN, *Microcosmus* (New York, Scribner, 1885), Vol. 1, p. xii.

564

Religion and the Modern World

A crisis confronts religion in the modern world. We are on the threshold of a 20th Century Renaissance, an event as truly great as the rebirth of Europe in the 16th Century.

Science and democracy are pressing for an acceptance and adjustment of their claims in the current presentation of revealed truth. The focus of the sanest thinking of our day is this: Can Christianity become the religion of reason and science as well as that of emotion and faith, and be made the power for individual and social progress which its Founder intended?

The evidences of this rebirth are everywhere about us. There is reverent and fearless demand for reality; a deepening sense of religion as social obligation as well as individual redemption; a reappraisal of religious experience, a rediscovery of its mystical element, and a passionate longing to bring the whole realm of life under the control of the Spirit.

We are taught that in earlier days the seven cardinal sins were: pride, avarice, luxury, envy, appetite, anger and sloth. Now with a finer ethical and social understanding we know that the cardinal sins of our time are more subtle. A modern writer has specified them thus: (1) politics without principles, (2) wealth without work, (3) pleasure without conscience, (4) knowledge without character, (5) commerce without morality, (6) science without humanity, (7) worship without sacrifice.

POOLE, WILLIAM C., in the *International Journal of Religious Education* (April, 1928, p. 13).

565

Religion an Ever-Progressing Tendency

Religion is not something fixed, but an ever-progressing and, for this very reason, ever-present tendency.

Religious instruction quickens, confirms, explains the feeling that man's own spiritual self, his soul, his mind and spirit, have their being and origin in God and proceed from God; it shows that the qualities and the nature of the soul, of the mind and spirit, have their being in and through God; it gives an insight into the being and working of God; it gives an insight into the relation of God to man, as it is clearly manifested in the mind and life of every one, in life as such, and particularly in the life and development of mankind, as they are preserved and revealed in the sacred books; it applies this knowledge to life as such, and particularly to and in the life of each one, and to the progressive development of mankind, so that the divine may be represented in the human, and that man may know and do his duty; it presents and points out the ways and means by which the desire to live in true unity with God may be gratified, and by which this unity, if impaired, may be restored.

FROEBEL, FRIEDRICH, *Education of Man* (New York, Appleton, 1887), pp. 140-141.

566

The Child Needs the Religious Heritage

The life of the child can be particularly enriched through the humanities of the regular curriculum. In story, history, biography, literature, and music the child should live through and identify himself with the finest religious experiences and aspirations of men. He should be led to see in its fullness the struggle of the race, through its prophets and seers, for a clearer perception of the meaning of life. No account of human history can omit this growth of mankind in religious stature; no survey of human thought can overlook the masterpieces of religious revelation; no study of human poetry can ignore the beauties of religious expression; no report of human courage can disregard the devotion of religious heroes; no contemplation of human destiny can neglect the fruit of religious meditation. From an intimate and sympathetic contact with the religious life of mankind, religious prophets will take their place in the ideal gallery by the side of great leaders in the fields of secular interest, the taboos which so often restrict and inhibit the religious life today will be banished, and the religious side of the child's nature will grow and expand.

CHAPMAN, J. C., and COUNTS, G. S., *Principles of Education* (Boston, Houghton Mifflin, 1924), p. 359.

567

Carlyle on the "Worship of Sorrow"

Small is it that thou canst trample the Earth with its injuries under thy feet, as old Greek Zeno trained thee: thou canst love the Earth while it injures thee, and even because it injures thee; for this a Greater than Zeno was needed, and he too was sent. Knowest thou that *"Worship of Sorrow"?* The Temple thereof, founded some eighteen centuries ago, now lies in ruins, overgrown with jungle, the habitation of doleful creatures: nevertheless, venture forward; in a low cript, arched out of falling fragments, thou findest the altar still there, and its sacred lamp perennially burning. . . .

"Cease, my much-respected Herr von Voltaire," thus apostrophizes the Professor: "shut thy sweet voice: for the task appointed thee seems finished. Sufficiently hast thou demonstrated this proposition, considerable or otherwise: That the Mythus of the Christian Religion looks not in the eighteenth century as it did in the eighth. Alas, were thy six-and-thirty quartos, and the six-and-thirty thousand other quartos and folios, and flying sheets or reams, printed before and since on the same subject, all needed to convince us of so little! But what next? Wilt thou help us to embody the divine Spirit of that Religion in a new Mythus, in a new vehicle and vesture, that our Souls, otherwise too like perishing, may live? What! thou hast no faculty in that kind? Only a torch for burning, no hammer for building? Take our thanks, then, and—thyself away.

"Meanwhile what are antiquated Mythuses to me? Or is the God present, felt in my own heart, a thing which Herr von Voltaire will dispute out of me: or dispute into me? To the '*Worship of Sorrow*' ascribe what origin and genesis thou pleasest, *has* not that Worship originated, and been generated; is it not *here?* Feel it in thy heart, and then say whether it is of God! This is Belief; all else is Opinion,—for which latter whoso will, let him worry and be worried."

Carlyle, Thomas, *Sartor Resartus* (New York, Burt, no date), pp. 190-191.

568

The Infinite Self

My reason for believing that there is one absolute World-Self, who embraces and is all reality, whose consciousness includes and infinitely transcends our own, in whose unity all the laws of nature and all the mysteries of experience must have their solution and their very being,—is simply that the profoundest agnosticism which you can possibly state in any coherent fashion, the deepest doubt which you can any way formulate about the world or the things that are therein, already presupposes, implies, demands, asserts, the existence of such a World-Self. . . . There is no escape from the infinite Self except by self-contradiction. Ignorant as I am about first causes, I am at least clear about the Self. If you deny him, you already in denying affirm him. You reckon ill when you leave him out. . . . The infinite Self is actually asserted by you in every proposition you utter, is there at the heart, so to speak, of the very multiplication table.

Royce, Josiah, *The Spirit of Modern Philosophy* (Boston, Houghton Mifflin, 1892), p. 349.

569

Influence of Example in Religion

My kind mother, for as such I must ever love the good Gretchen, did me one altogether invaluable service: she taught me, less indeed by word than by act and daily reverent look and habitude, her own simple version of the Christian faith. Andreas too attended church; yet more like a parade-duty, for which he in the other world expected pay with arrears,—as I trust, he has received; but my mother, with a true woman's heart, and fine though uncultivated sense, was in the strictest acceptation religious. How indestructibly the good grows, and propagates itself, even among the weedy entanglements of evil! The highest whom I knew on earth I here saw bowed down, with awe unspeakable before a Higher in Heaven: such things, especially in infancy, reach inwards to the very core of your being; mysteriously does a Holy of Holies build itself into visibility in the mysterious deeps; and Reverence, the divinest in man, springs forth undying from its mean envelopment of fear. Wouldst thou rather be a peasant's son that knew, were it never so rudely, there was a God in Heaven and Man; or a duke's son that only knew there were two-and-thirty quarters on the family coach?

Carlyle, Thomas, *Sartor Resartus* (New York, Burt, no date), p. 100.

570

A Geologist's Reflection on Matter and Spirit

In what light, then, are we to regard all the vicissitudes and activities of the lifetime of a universe? What are they but a brief agitation on the surface of the infinite ocean of matter—a momentary ripple raised by the presence of the Omnipotent hand—destined speedily to subside, and again to be raised by the breath of Omnific Power?

In the presence of such conceptions as these, what is man, and what are the works of his hands? What are fleets, and forts, and cities with their insect hum? What are temples, and pyramids, and Chinese walls? The agitation of particles of dust in a distant corner of the universe. The track of an insect on the ocean's shore. The breath of an infant in the tornado's blast.

But what is the spirit of man, whose thoughts thus wander through eternity? What is the intelligence of man which climbs the battlements of the palace of Omnipotence—which seizes hold on infinity—which, though chained in flesh, spurns its fetters, and feels evermore that it is the offspring of God—the brother of angels—the heir of perpetuity—and will soon shake its shambles down amongst the rubbish of decaying worlds, and dwell superior to the mutations of matter and the revolutions of the ages? What, in comparison with the crumbling of mountains and the decay of worlds, is the being possessed of such a consciousness and such a destiny? Who shall tremble at the wreck of matter, when, in perpetual youth, he shall outlive suns, and systems, and firmaments, and through the ceaseless cycles of material history shall see creation rise upon creation—the ever-recurring mornings of eternal life?

WINCHELL, ALEXANDER, *Sketches of Creation* (New York, Harper, 1870), pp. 430-431.

571

Consequences of Materialistic Naturalism

Recently I spent an evening with a young university graduate who had made a brilliant record in his course and has made a brilliant record ever since. He was all at sea about God. He was inherently reverent. He called himself "unescapably religious," and he did not want to be otherwise. He very rarely went to church. He did regularly pray, but he was at sea about God. He told me of his friends, leading men in their college classes, with whom he kept in touch—that they were largely alienated from the church, that they had a kind of private religion which sometimes helped them, that only recently they had talked together all night long about God and immortality, but that in the end they still were all at sea. Now, the upshot of this familiar attitude is ethical.

Men wonder what right they have to expect much of human nature and the world. Are not selfishness, brutality, lust, bloodthirstiness, industrial exploitation, war, natural in a world where all moral living is only an accidental episode in an aeonic physical process? Must we not take such things for granted and put up with them as the inevitable product of an animal inheritance which it is folly to hope to outgrow? You might as well expect to find a climate without its appropriate results in fauna and flora as to find prevalent materialism without that sort of ethical reaction.

They say that under the snow and ice of Spitzbergen are the remains of tropic forests. Once, where arctic cold now reigns, luxuriant flora grew. If one asks the explanation for this desolation of a once fruitful territory, the answer is plain: the climate changed. Slowly, imperceptibly at first, the climate which had made forests possible began to alter. Perhaps generations passed without obvious effect, but the effect was there. What once grew naturally at last could not grow at all. So religious faith in the spiritual nature of creation, its divine origin, meaning, and destiny, creates a climate. That is perhaps the most important thing religion does. And in that climate it is natural for Christ's ideals of life to grow. But Spitzbergen's forests no more surely surrendered to the ice than those ideals will vanish from a world where materialistic naturalism takes the place of religious faith.

FOSDICK, HARRY EMERSON, *The Modern Use of the Bible* (New York, Macmillan, 1927), pp. 250-251.

572

Spiritual Dynamic in Man

There is in Man a Higher than love of happiness: he can do without happiness and instead thereof find blessedness! Was it not to preach forth this same Higher that sages and martyrs, the poet, and the priest in all times, have spoken and suffered; bearing testimony through life and through death of the Godlike that is in man, and how in the Godlike only has he strength and freedom? . . . Love not Pleasure; love God. This is the Everlasting Yea, wherein all contradiction is solved: wherein whoso walks and works, it is well with him.

Carlyle, Thomas, *Sartor Resartus* (New York, Burt, no date), p. 189.

573

Prayer Against Complications

Lord, I have studied Thy Revelations, the Manifestations of Thyself to men. I have listened to the words of Royce, Mill, Sanday, Dewey, Fraser, James, Fechner, Gore, Hoeffding, Bushnell, and Croce. Seeking a breadth of understanding, I have read Anaxagoras, Aristotle, Plato, Newton, Archimedes, Leibnitz, Spinoza, and Kant. Anselm, Augustine, Erasmus, Luther, Calvin, Knox, and Wesley have filled me with the elaborations of Christian belief. I have gone to the poets, Tennyson, Milton, Lowell, and Thompson.

Successively I have been Humanist, Socialist, Individualist —Behaviorist, Personalist, Pragmatist, and Utilitarian. Now I waver. God, forgive my weariness with mental machinations. Let me find peace from mental gymnastics.

Boethius, Descartes, Hume, Hegel, and Sabatier sleep with their Christology, soteriology, sociology, psychology and eschatology. Lord, I am weary of the exaggerations of creeds Athanasian, Nicene and Chalcedonian. Give me the simple message of Thy Peace and Love. Give me the gentle Manifestation of the Man Christ Jesus.

Inge, Wieman, Eddington, Whitehead, Jeans, and Einstein stand now at the doors of my mind. I hear the talk of Reason, Values, Reality, Atoms, Relativity, Regeneration, Responsibility and Spirit. God, forgive my weariness with complications mental, and give me the sound of Jesus at the door, and the voice, Behold I stand and knock. Give me His Love and Human Understanding. I ask for nothing more. Amen.

Kresensky, Raymond, in *The Christian Advocate* (New York, May 21, 1931).

574

Immortality

Christ taught man to think of God as the All-Father. But He has done something else. By His life and character Christ has compelled us to make the choice between a practical atheism and a thought of God as being at least as good as Christ Himself. If the Universe is the product of blind mechanical energy, or even of some half-conscious Life-force, then the heart and mind of Jesus is just a happy accident; it is merely the most remarkable of all the unexpected by-products cast up by the evolutionary process in its age-long aimless track. But if there is a purpose behind it all, then that life and character are not to be explained as accidents. They are an evidence of what the Creative Mind that wills it all is on occasion capable of producing. But no creative mind can produce something higher and nobler than itself. Therefore the emergence on the plane of history of the man Jesus forces thought to a decision. Either no purpose controls the universe at all and there is no God, or else that purpose is as noble, that mind has thoughts as high, as the purpose and the mind of Christ.

I must make my choice. There are things which make it hard to believe in a living, loving God. But reflection shows that it is harder still to accept the paradox that all is accident. I make my choice. What follows? "If ye then being evil know how to give good gifts unto your children, how much more your heavenly Father." If a human parent would not allow the extinction of a cherished child, is God likely to consent to such a thing? If a reasonably good employer hates to regard his workmen simply as "hands," as mere instruments for working out his purpose, are God's thoughts less than his? If a general loves the men whom at times he is compelled to treat as "cannon-fodder" incidental to the attainment of a larger end, will God care less? Will He be content to treat a living personality like a rocket which, once its cascade of stars has been displayed, has fulfilled its function and falls back unregarded into the surrounding gloom?

In the belief in immortality the rationality of the Universe is at stake. By our decision as to this the quality of Reality is finally appraised. If there is a God at all, we are His children, and He must care for us. If we believe in God at all, it is not sentiment, nor self-deluded hope, it is the coldest logic, that compels us to approach the question of a future life from the standpoint of His greatness, not that of our littleness and weariness, our doubts and our despair. "The souls of the righteous are in the hand of God,"—and we may be content to leave them there.

Streeter, Burnett Hillman, *Reality* (New York, Macmillan, 1928), pp. 314-316.

575

The Most Important Thing

From my point of view there are two things of supreme importance in this world, two ideas or beliefs upon which, in the last analysis, the weal or woe of the race depends, and I am not going to say that belief in the possibilities of scientific progress is the most important. *The most important thing in the world is a belief in the reality of moral and spiritual values.* It was because we lost that belief that the World War came, and if we do not now find a way to regain and to strengthen that belief, then science is of no value.

Millikan, Robert A., *Science and Life* (Boston, Pilgrim Press, 1924), p. 36.

Bibliography

(Numbers refer to excerpts.)

Adamson, John E. *The Individual and the Environment.* New York, Longmans, 1921. 32, 208, 249, 317, 324.

Addams, Jane. *Democracy and Social Ethics.* New York, Macmillan, 1916. 297.

Addams, Jane. *The Spirit of Youth and the City Streets.* New York, Macmillan, 1916. 245.

Alden, Raymond MacDonald (editor). *Readings in English Prose of the Nineteenth Century. See* Arnold, M., *Sweetness and Light.*

Armentrout, Winfield O. (joint author). *An Introduction to Education.* Chicago, Scott, Foresman, 1924. 166.

Arnold, Matthew. *Culture and Anarchy.* New York, Macmillan, 1912. 487.

Arnold, Matthew. "Sweetness and Light," in *Readings in English Prose of the Nineteenth Century,* Alden. Boston, Houghton Mifflin, 1917. 292.

Athearn, Clarence. *Interchurch Government.* New York, Century, 1925. 109.

Athearn, Walter Scott. *Character Building in a Democracy.* New York, Macmillan, 1924. 519, 540, 546.

Aurelius Antoninus, Marcus. *The Golden Book of Marcus Aurelius.* (Translated by Casaubon; Everyman's Library Edition, edited by W. H. D. Rouse.) New York, Dutton, 1906. 145, 146.

Aurelius Antoninus, Marcus. *Thoughts of an Emperor.* Philadelphia, Altemus, no date. 139.

Bacon, Francis. *Essays: or, Counsels, Civil and Moral.* New York, Burt, 1883. 161.

Bagley, William Chandler. *Education, Crime, and Social Progress.* New York, Macmillan, 1932. 256.

Bagley, William Chandler. *Educational Values.* New York, Macmillan, 1915. 231.

Bagley, William Chandler. *The Educative Process.* New York, Macmillan, 1905. 29, 55, 150, 163, 180, 362.

Bagley, William Chandler, in *School and Society.* 505.

Bagley, William Chandler. Editor's introduction in Stevenson, J. A., *The Project Method of Teaching.* New York, Macmillan, 1921. 382.

Bain, Alexander. *Education as a Science.* New York, Appleton, 1908. 383, 419.

Bakewell, Charles Montague. *Source Book in Ancient Philosophy.* New York, Scribner, 1907. 59, 69, 322, 525.

Baldwin, James Mark. *The Individual and Society.* Boston, Gorham, 1911. 189.

Barnard's American Journal of Education. 233, 389, 514.

Barr, Arvil Sylvester. *The Supervision of Instruction.* New York, Appleton, 1926. 437.

Bell, Bernard Iddings. *Beyond Agnosticism.* New York, Harper, 1929. 77, 80.

Bennett, Henry Eastman. *School Efficiency.* Boston, Ginn, 1917. 481.

Benson, Arthur C. *The Schoolmaster.* New York, Putnam, 1908. 399.

Betts, George Herbert. *The Curriculum of Religious Education.* New York, Abingdon, 1924. 360, 368, 521.

Betts, George Herbert. *Method in Teaching Religion.* New York, Abingdon, 1925. 561.

Betts, George Herbert. *Social Principles of Education.* New York, Scribner, 1913. 193.

Bible. O. T. 77, 128, 132.

Bible. N. T. 136.

Blackmar, Frank Wilson. *Justifiable Individualism.* New York, Crowell, 1922. 197.

Blackmar, Frank Wilson. *Outlines of Sociology.* New York, Macmillan, 1917. 183, 302.

Boddy, William H., in *International Journal of Religious Education.* 217.

Bode, Boyd Henry. *Fundamentals of Education.* New York, Macmillan, 1921. 67, 151.

Bode, Boyd Henry. *Modern Educational Theories.* New York, Macmillan, 1927. 357, 385, 386.

Bode, Boyd Henry, in William H. Kilpatrick (editor), *The Educational Frontier.* New York, Century, 1933. 441.

Bolton, Frederick E. *Principles of Education.* New York, Scribner, 1910. 13, 264.

Bonser, Frederick Gordon. *The Elementary School Curriculum.* New York, Macmillan, 1921. 367, 373.

Bower, William Clayton. *The Curriculum of Religious Education.* New York, Scribner, 1925. 371.

Bradley, Francis Herbert. *Appearance and Reality.* London, George Allen, 1916. 321.

Briggs, Thomas Henry. *Curriculum Problems.* New York, Macmillan, 1927. 363.

Brightman, Edgar Sheffield. *An Introduction to Philosophy.* New York, Holt, 1925. 45, 92, 103, 140.

Brightman, Edgar Sheffield. *A Philosophy of Ideals.* New York, Holt, 1928. 271, 330.

Brooks, Rev. Charles, in *Barnard's American Journal of Education.* 514.

Brooks, Edward. *Normal Methods of Teaching.* Philadelphia, Normal Publishing Co., 1889. 56.

Brown, William Adams. *Beliefs That Matter.* New York, Scribner, 1928. 46, 333.

Brumbaugh, Martin G. *The Making of a Teacher.* Philadelphia, Sunday School Times Co., 1905. 112, 409, 412, 425.

Buchner, Edward F. *Kant's Educational Theory.* Philadelphia, Lippincott, 1904. 434.

Buckingham, Burdette R. *Research for Teachers.* New York, Silver, Burdett, 1926. 400, 446.

Buckle, Henry Thomas. *History of Civilization.* New York, Appleton, 1885. 251.

Bureau of Education. *See* U. S. Office of Education.

Burnet, John. *Aristotle on Education.* Cambridge, University Press, 1913. 16.

Burton, William H. (joint author). *The Supervision of Instruction.* New York, Appleton, 1926. 437.

Butler, Harold Edgeworth (translator). *See* Quintilian, *Institutes of Oratory.*

BUTLER, NICHOLAS MURRAY. *The Meaning of Education.* New York, Macmillan, 1898. 21.

BUTLER, NICHOLAS MURRAY. *The Meaning of Education* (New and Revised Edition). New York, Scribner, 1915. 206, 209.

CALKINS, MARY WHITON. *Persistent Problems of Philosophy.* New York, Macmillan, 1907. 64, 70.

CARLYLE, THOMAS. *Sartor Resartus.* New York, Burt (no date). 130, 512, 567, 569, 572.

CASAUBON, MERIC (translator). *See* Aurelius Antoninus, M., *The Golden Book of Marcus Aurelius.*

CHAPIN, HENRY DWIGHT. *Heredity and Child Culture.* New York, Dutton, 1922. 224.

CHAPMAN, JAMES CROSBY. *Principles of Education.* Boston, Houghton Mifflin, 1924. 348, 395, 566.

CHARTERS, WERRETT WALLACE. *Curriculum Construction.* New York, Macmillan, 1923. 11.

CHARTERS, WERRETT WALLACE. *Methods of Teaching.* Chicago, Row, Peterson, 1912. 415.

CHERRY, HENRY H. *Education the Basis of Democracy.* Boston, Heath, 1926. 529.

Child Study. New York, The Child Study Association of America. 287.

CHILDS, JOHN L., in William H. Kilpatrick (editor), *The Educational Frontier.* New York, Century, 1933. 504.

Christian Advocate, The. New York. 573.

CLOW, FREDERICK R. *Principles of Sociology with Educational Applications.* New York, Macmillan, 1927. 301.

COE, GEORGE A. *Educating for Citizenship.* New York, Scribner, 1932. 489.

COE, GEORGE A. *Education in Religion and Morals.* New York, Revell, 1904. 391, 526.

COE, GEORGE A. *What Is Christian Education?* New York, Scribner, 1929. 554.

COLGROVE, CHAUNCEY P. *The Teacher and the School.* New York, Scribner, 1910. 416, 418.

COMENIUS, JOHANN AMOS. *The Great Didactic.* (Edited by M. W. Keatinge.) London, Black, 1910. 26, 379.

CONKLIN, EDWIN G. *Heredity and Environment* (Fourth Revised Edition). Princeton, Princeton University Press, 1922. 260, 281.

CONN, HERBERT W. *Social Heredity and Social Evolution.* New York, Abingdon, 1914. 204, 242, 244, 556.

COOLEY, CHARLES HORTON. *Human Nature and the Social Order.* New York, Scribner, 1922. 186.

COOLEY, CHARLES HORTON. *Social Process.* New York, Scribner, 1918. 200.

COPE, HENRY F. *Education for Democracy.* New York, Macmillan, 1920. 488, 528.

COPE, HENRY F. *Organizing the Church School.* Garden City, New York, Harper, 1929. 547.

COUNTS, GEORGE SYLVESTER (joint author). *Principles of Education.* Boston, Houghton Mifflin, 1924. 348, 395, 566.

COURSAULT, JESSE H. *Principles of Education.* New York, Silver, Burdett, 1920. 12.

CUBBERLEY, ELLWOOD PATTERSON. *An Introduction to the Study of Education and to Teaching.* Boston, Houghton Mifflin, 1925. 358, 428.

CUBBERLEY, ELLWOOD PATTERSON. *Public Education in the United States.* Boston, Houghton Mifflin, 1919. 440.

CUBBERLEY, ELLWOOD PATTERSON. *Public School Administration.* Boston, Houghton Mifflin, 1922. 429.

CURTIS, HENRY STODDARD. *Education Through Play.* New York, Macmillan, 1926. 471.

DAVENPORT, EUGENE. *Education for Efficiency.* Boston, Heath, 1914. 465.

DAVIDSON, THOMAS. *Education as World Building.* Cambridge, Harvard University Press, 1925. 2.

DAVIDSON, THOMAS. *The Education of the Greek People.* New York, Appleton, 1894. 24.

DAVIS, SHELDON E. *The Work of the Teacher.* New York, Macmillan, 1918. 414.

DEWEY, JOHN. *Democracy and Education.* New York, Macmillan, 1916. 7, 99, 235, 318.

DEWEY, JOHN. *Ethics.* New York, Holt, 1908. 259.

DEWEY, JOHN. *How We Think.* Boston, Heath, 1910. 408.

Dewey, John. *Reconstruction in Philosophy.* New York, Holt, 1920. 96.

Dewey, John, in William H. Kilpatrick (editor), *The Educational Frontier.* New York, Century, 1933. 504.

Dewey, John, in *Elementary School Teacher.* 436.

Dickson, Virgil Everett. *Mental Tests and the Classroom Teacher.* Yonkers-on-Hudson, New York, World Book Co., 1924. 448.

Dimnet, Ernest. *What We Live By.* New York, Simon & Schuster, 1932. 516.

Drake, Durant. *Problems of Conduct.* Boston, Houghton Mifflin, 1921. 129.

Drake, Samuel G. *Biography and History of the Indian of North America.* Boston, Mussey, 1851. 295.

Durant, William James. *The Story of Philosophy.* New York, Simon & Schuster. 48.

East, Edward Murray. *Mankind at the Crossroads.* New York, Scribner, 1924. 222, 226, 237.

Eastern Commercial Teachers' Association. *Second Yearbook,* 1929. 365.

Eddington, Arthur S. *Science and the Unseen World.* New York, Macmillan, 1929. 313, 315, 538.

Edman, Irwin. *Human Traits.* Boston, Houghton Mifflin, 1920. 228.

Elementary School Teacher. Chicago, Department of Education, University of Chicago. 436.

Eliot, Charles W. *Education for Efficiency.* Boston, Houghton Mifflin, 1909. 464.

Ellwood, Charles A. *Sociology and Modern Social Problems.* New York, American Book Co., 1924. 303.

Emerson, Ralph Waldo. *Education* (Riverside Series). Boston, Houghton Mifflin, 1909. 22, 530.

Emerson, Ralph Waldo. *Essays.* New York, Caldwell (no date). 143, 144.

Emerson, Ralph Waldo. *Essays and Addresses* (Lake English Classics). Chicago, Scott, Foresman, 1919. 276.

Eucken, Rudolph. *Collected Essays.* New York, Scribner, 1914. 509.

FICHTE, JOHANN GOTTLIEB. *Fichte's Popular Works* (Translated by William Smith). London, Trübner, 1889. 141, 506, 542.

FINDLAY, JOSEPH J. *Foundations of Education.* New York, Holt, 1926. 170.

FINNEY, ROSS LEE. *A Sociological Philosophy of Education.* New York, Macmillan, 1928. 65, 173, 293, 364, 396, 466.

FISKE, GEORGE W. *Purpose in Teaching Religion.* New York, Abingdon, 1927. 548.

FISKE, JOHN. *The Meaning of Infancy.* Boston, Houghton Mifflin, 1911. 227.

FITCH, SIR JOSHUA G. *Lectures on Teaching.* New York, Macmillan, 1885. 377, 422.

FLEXNER, ABRAHAM. *Universities—American, English, German.* New York, Oxford University Press, 1930. 159.

FOREIGN MISSIONS CONFERENCE. *Christian Education in China.* 1922. 433.

FOSDICK, HARRY EMERSON. *The Hope of the World.* New York, Harper, 1933. 485.

FOSDICK, HARRY EMERSON. *The Modern Use of the Bible.* New York, Macmillan, 1927. 571.

FOSTER, HERBERT H. *High School Administration.* New York, Century, 1928. 398.

FOX, CHARLES. *Educational Psychology.* New York, Harcourt, 1925. 340.

FRASIER, GEORGE W. *An Introduction to Education.* Chicago, Scott, Foresman, 1924. 166.

FREEMAN, FRANK N. *The Psychology of the Common Branches.* Boston, Houghton Mifflin, 1916. 339.

FROEBEL, FRIEDRICH. *Education of Man.* New York, Appleton, 1887. 18, 172, 565.

FROUDE, JAMES A. *Short Studies on Great Subjects* (Second Series). New York, Scribner, 1871. 167.

FULLERTON, GEORGE S. *Introduction to Philosophy.* New York, Macmillan, 1906. 52.

GALLOWAY, LEE, in Eastern Commercial Teachers Association, *Second Yearbook,* 1929. 365.

GALTON, SIR FRANCIS. *Hereditary Genius.* London, Macmillan, 1914. 223.

GATES, ARTHUR I. *Psychology for Students of Education.* New York, Macmillan, 1928. 341.

GILES, HERBERT A. *The Sayings of Confucius.* London, Murray, 1932. 138.

GILLETTE, JOHN M. *Vocational Education.* New York, American Book Co., 1910. 475.

GILLIN, JOHN L. (joint author). *Outlines of Sociology.* New York, Macmillan, 1917. 183, 302.

GODDARD, HENRY H. *Human Efficiency and Levels of Intelligence.* Princeton, Princeton University Press, 1920. 493.

GOODRICH, SAMUEL G. *Peter Parley's Geography for Children.* Hartford, Huntingdon, 1836. 388.

GOODSELL, WILLYSTINE. *A History of the Family as a Social and Educational Institution.* New York, Macmillan, 1920. 195.

GRAVES, FRANK P. *The Administration of American Education.* New York, Macmillan, 1932. 498.

GRAVES, FRANK P. *A Student's History of Education.* New York, Macmillan, 1918. 216.

GRIGGS, EDWARD HOWARD. *Moral Education.* Croton-on-Hudson, Orchard Hill Press, 1903. 527.

GULICK, LUTHER H. *A Philosophy of Play.* New York, Scribner, 1920. 479, 480.

HAAS, JOHN A. W. *Freedom and Christian Conduct.* New York, Macmillan, 1923. 79.

HALDANE, JOHN S. *Materialism.* New York, Harper, 1932. 1, 331, 544.

HALDANE, JOHN S. *Mechanism, Life and Personality.* London, Murray, 1914. 90, 312, 328.

HALDANE, JOHN S. *The Sciences and Philosophy.* Garden City, New York, Doubleday, 1930. 327, 350, 353.

HALL, G. STANLEY. *Life and Confessions of a Psychologist.* New York, Appleton, 1923. 427.

HANUS, PAUL H. *Educational Aims and Educational Values.* New York, Macmillan, 1912. 169, 178.

HARRIS, WILLIAM T. *Psychologic Foundations of Education.* New York, Appleton, 1898. 38, 61, 182, 191, 319, 329, 349, 551, 553.

HAWTHORNE, MARION O. (joint author). *Method in Teaching Religion.* New York, Abingdon, 1924. 561.

HAYES, EDWARD C. *Introduction to the Study of Sociology.* New York, Appleton, 1918. 205.

HEATHCOTE, CHARLES W. *The Essentials of Religious Education.* Boston, Sherman French, 1916. 558.

HEILMAN, JACOB D., in National Society for the Study of Education, *Twenty-Seventh Yearbook*, 1928. 462.

HENDERSON, CHARLES H. *The Charioteer.* Boston, Houghton Mifflin, 1933. 110.

HENDERSON, CHARLES H. *The Children of Good Fortune.* Boston, Houghton Mifflin, 1905. 517.

HENDERSON, CHARLES H. *What Is It To Be Educated?* Boston, Houghton Mifflin, 1914. 10, 274, 277, 279.

HENDERSON, ERNEST N. *Principles of Education.* New York, Macmillan, 1916. 171, 468, 476.

HENLEY, WILLIAM E. *Echoes of Life and Death.* London, Macmillan, 1926. 278.

HERACLITUS, quoted in Charles M. Bakewell, *Source Book in Ancient Philosophy.* New York, Scribner, 1907. 525.

HERBART, JOHANN F. *Outlines of Educational Doctrines* (Lange Translation). New York, Macmillan, 1904. 523.

HERBART, JOHANN F. *Science of Education* (Felkin Translation). Boston, Heath, 1895. 535.

HETHERINGTON, HECTOR J. W. *Social Purpose.* New York, Macmillan, 1918. 499.

HILDRETH, GERTRUDE H., in *Progressive Education.* 461.

HINSDALE, BURKE A. *Schools and Studies.* Boston, Osgood, 1884. 267, 384, 491.

HINSDALE, BURKE A. *Studies in Education.* New York, American Book Co., 1906. 562.

HOBHOUSE, LEONARD T. *Social Evolution.* New York, Columbia University Press, 1911. 185.

HOCKING, WILLIAM E. *Human Nature and Its Remaking.* New Haven, Yale University Press, 1932. 261, 280.

HOCKING, WILLIAM E. *Types of Philosophy.* New York, Scribner, 1929. 72, 74, 105.

HOLMES, ARTHUR. *Principles of Character Making.* Philadelphia, Lippincott, 1913. 524.

Horne, Herman Harrell. *The Democratic Philosophy of Education.* New York, Macmillan, 1932. 104.

Horne, Herman Harrell. *The Essentials of Leadership.* Nashville, Tennessee, Cokesbury Press, 1931. 402.

Horne, Herman Harrell. *Free Will and Human Responsibility.* New York, Macmillan, 1912. 101, 190.

Horne, Herman Harrell. *Idealism in Education.* New York, Macmillan, 1923. 115, 118, 187, 192, 214, 219, 232, 241, 257, 532.

Horne, Herman Harrell. *Jesus as a Philosopher.* New York, Abingdon, 1927. 134.

Horne, Herman Harrell. *Jesus Our Standard.* New York, Abingdon, 1918. 125.

Horne, Herman Harrell. *The Philosophy of Education.* New York, Macmillan, 1905. 41.

Horne, Herman Harrell. *The Philosophy of Education.* New York, Macmillan, 1923. 298.

Horne, Herman Harrell. *The Philosophy of Education.* New York, Macmillan, 1927. 51, 68.

Horne, Herman Harrell. *The Philosophy of Education.* New York, Macmillan, 1930. 108.

Horne, Herman Harrell. *The Psychological Principles of Education.* New York, Macmillan, 1915. 269, 424, 550.

Horne, Herman Harrell. *The Psychological Principles of Education.* New York, Macmillan, 1928. 175, 361, 539.

Horne, Herman Harrell. *Story-Telling, Questioning and Studying.* New York, Macmillan, 1919. 449.

Horne, Herman Harrell. *The Teacher as Artist.* Boston, Houghton Mifflin, 1917. 420.

Horne, Herman Harrell. *This New Education.* New York, Abingdon, 1931. 155, 263, 289, 294, 311, 355, 515, 534.

Horne, Herman Harrell, in *The Journal of the National Education Association.* 34.

Hullfish, Henry G., in William H. Kilpatrick (editor), *The Educational Frontier.* New York, Century, 1933. 459.

Huxley, Thomas Henry. *Lay Sermons.* New York, Appleton, 1890. 83.

Huxley, Thomas Henry. "Lay Sermons," in *Readings in English Prose of the Nineteenth Century,* Alden. Boston, Houghton Mifflin, 1917. 85.

HUXLEY, THOMAS HENRY. *Science and Education.* New York, Appleton, 1897. 27.

HYDE, WILLIAM DE WITT. *The Five Great Philosophies of Life.* New York, Macmillan, 1932. 543.

HYDE, WILLIAM DE WITT. *The Teacher's Philosophy.* Boston, Houghton Mifflin, 1910. 124.

INGE, WILLIAM R. *Christian Ethics and Modern Problems.* New York, Putnam, 1930. 81.

INGLIS, ALEXANDER J. *Principles of Education.* Boston, Houghton Mifflin, 1918. 174.

International Journal of Religious Education, Chicago. 564.

JAMES, WILLIAM. *Pragmatism.* New York, Longmans, 1907. 44.

JAMES, WILLIAM. *Principles of Psychology.* New York, Holt, 1890. 273, 323.

JAMES, WILLIAM. *Talks to Teachers.* New York, Holt, 1912. 4, 93, 133, 238, 275, 522.

JAMES, WILLIAM. *The Will to Believe.* New York, Longmans, 1912. 188.

JEANS, SIR JAMES H. *The Mysterious Universe.* New York, Macmillan, 1931. 78, 88.

JEANS, SIR JAMES H. *The New Background of Science.* New York, Macmillan, 1933. 122.

JENNINGS, HERBERT S. *The Biological Basis of Human Nature.* New York, Norton, 1930. 114.

JENNINGS, HERBERT S., in *Suggestions of Modern Science Concerning Education.* New York, Macmillan, 1917. 469.

JONES, SIR HENRY. *Idealism as a Practical Creed.* Glasgow, Jackson, Son & Co., 1910. 120.

Journal of Education. Boston, New England Publishing Company. 54, 497.

Journal of Educational Psychology. Baltimore, Warwick and York. 463.

Journal of Educational Research. Bloomington, Illinois, Public School Publishing Company. 454.

JUDD, CHARLES H. *Psychology of High School Subjects.* Boston, Ginn, 1915. 343, 344.

Judd, Charles H. *The Psychology of Social Institutions.* New York, Macmillan, 1926. 291.

Kagawa, Toyohito. *Love, the Law of Life.* Philadelphia, Winston, 1929. 376.

Kandel, Isaac L. *Twenty-five Years in American Education.* New York, Macmillan, 1924. 375.

Kandel, Isaac L., in *Teachers College Record.* 486.

Kant, Immanuel. *Critique of Practical Reason.* London, Longmans, 1927. 266.

Keatinge, Maurice Walter (translator). *See* Comenius, J. A., *The Great Didactic.*

Khayyam, Omar. *See* Omar Khayyam.

Kidd, Benjamin. *Social Evolution.* New York, Macmillan, 1894. 201.

Kilpatrick, William H. *Foundations of Method.* New York, Macmillan, 1932. 374, 381.

Kilpatrick, William H. (editor). *The Educational Frontier.* New York, Century, 1933. 439, 441, 459, 504.

King, Irving. *Social Aspects of Education.* New York, Macmillan, 1916. 300.

Kinneman, John A. *Society and Education.* New York, Macmillan, 1932. 252.

Kipling, Rudyard. *The Second Jungle Book.* New York, Doubleday, 1922. 199.

Kirkpatrick, Edwin A. *Fundamentals of Child Study.* New York, Macmillan, 1921. 236, 243.

Kresensky, Raymond, in *The Christian Advocate.* 573.

Krüsi, Johann H. H. *Pestalozzi.* Cincinnati, Hinkle, 1874. 19.

Kuehner, Quincy A. *The Evolution of the Modern Concept of School Discipline.* Allentown, Pennsylvania, Weaber, 1913. 392, 404, 413, 423.

Lee, Joseph. *Play in Education.* New York, Macmillan, 1922. 472.

Leighton, Joseph A. *The Field of Philosophy.* New York, Appleton, 1919. 58.

Lord, John. *Beacon Lights of History.* New York, Fords, Howard and Hulbert, 1903. 135.

LOTZE, HERMAN. *Microcosmus.* New York, Scribner, 1885. 49, 91, 563.

LUTHER, MARTIN, in Painter, Franklin V. N., *Luther on Education.* Philadelphia, Lutheran Publishing Society, 1889. 288.

LYMAN, EUGENE W. *The Meaning and Truth of Religion.* New York, Scribner, 1933. 82.

LYND, ROBERT STAUGHTON, and LYND, HELEN MERRELL. *Middletown.* New York, Harcourt, 1929. 503.

McCALL, WILLIAM A. *How to Measure in Education.* New York, Macmillan, 1922. 443, 453, 458.

McDOUGALL, WILLIAM, in *Behaviorism—A Battle Line,* edited by William P. King. Nashville, Tennessee, Cokesbury Press, 1930. 332.

McFARLAND, ROSS A., in *Religious Education.* 87, 351.

MACIVER, ROBERT M. *Community.* New York, Macmillan, 1917. 202.

McKECHNIE, WILLIAM S. *The State and the Individual.* Glasgow, 1896. 502.

McMURRY, CHARLES A. *How to Organize the Curriculum.* New York, Macmillan, 1923. 372.

MANN, HORACE. *Life and Works.* Boston, Lee and Shepard, 1891. 405, 435, 490.

MARTIN, EVERETT D. *The Meaning of a Liberal Education.* New York, Norton, 1926. 20.

MATHER, KIRTLEY F. *Science in Search of God.* New York, Holt, 1928. 240.

MILL, JOHN S. "On Application," in Hinsdale, B. A., *Schools and Studies.* Boston, Osgood, 1884. 384.

MILL, JOHN S. *On Liberty.* London, Parker, 1859. 496, 500.

MILL, JOHN S. *Utilitarianism* (Everyman's Library Edition). New York, Dutton, 1910. 213.

MILLER, IRVING E. *Education for the Needs of Life.* New York, Macmillan, 1922. 152.

MILLIKAN, ROBERT A. *Evolution in Science and Religion.* New Haven, Yale University Press, 1927. 148, 181.

MILLIKAN, ROBERT A. *Science and Life.* Boston, Pilgrim Press, 1924. 575.

MILTON, JOHN. *Milton's Tractate on Education.* New York, Macmillan, 1911. 25.

MILTON, JOHN. *Paradise Lost.* 123.

MONROE, PAUL. *Brief Course in the History of Education.* New York, Macmillan, 1907. 40, 369.

MONROE, PAUL. *Source Book in the History of Education.* New York, Macmillan, 1901. 36.

MONROE, PAUL. *A Text-book in the History of Education.* New York, Macmillan, 1930. 14.

MONROE, WALTER S. *The Theory of Educational Measurements.* Boston, Houghton Mifflin, 1923. 445, 456.

MONTAIGNE, DE, MICHEL EYQUEM. "Essay upon the Education of Children," in *Barnard's American Journal of Education.* 233.

MORGAN, ALEXANDER. *Education and Social Progress.* New York, Longmans, 1916. 299.

MORRIS, EDWARD E. (editor). *Milton's Tractate on Education.* New York, Macmillan, 1911. 25.

MORRISON, HENRY C. *The Practice of Teaching in the Secondary School* (Revised Edition). Chicago, University of Chicago Press, 1932. 410.

MUNROE, JAMES P. *The Educational Ideal.* Boston, Heath, 1896. 86.

MUNROE, JAMES P. *The Human Factor in Education.* New York, Macmillan, 1921. 272.

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES (Department of Superintendence). *Yearbooks.* Sixth (1928), 356; Ninth (1931), 401, 432; Tenth (1932), 156, 520.

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES. *Journal.* Washington. 194.

NATIONAL SOCIETY FOR THE STUDY OF EDUCATION. *Yearbooks.* Seventeenth (1918), 447; Twenty-seventh (1927), 462.

NEUMANN, HENRY. *Education for Moral Growth.* New York, Appleton, 1924. 100, 119, 121.

NORSWORTHY, NAOMI (joint author). *How To Teach.* New York, Macmillan, 1917. 218, 483.

NORSWORTHY, NAOMI. *The Psychology of Childhood.* New York, Macmillan, 1918. 234, 467, 559.

OGDEN, ROBERT M. *Psychology and Education.* New York, Harcourt, 1926. 335.

OMAR KHAYYAM. *Rubáiyát.* 131.

O'SHEA, MICHAEL V. (editor). *The Child: His Nature and His Needs.* Children's Foundation, Valparaiso, Indiana, 1924. 531.

O'SHEA, MICHAEL V. *Education as Adjustment.* New York, Longmans, 1916. 31.

O'SHEA, MICHAEL V. *Social Development and Education.* Boston, Houghton Mifflin, 1909. 286, 304.

OWEN, RALPH DORNFELD. *Principles of Adolescent Education.* New York, Ronald Press, 1929. 366.

PAINTER, FRANKLIN V. N. *History of Education.* New York, Appleton, 1912. 560.

PAINTER, FRANKLIN V. N. *Luther on Education.* Philadelphia, Lutheran Publishing Society, 1889. 15, 288.

PARLEY, PETER (pseudonym). *See* Goodrich, Samuel G.

PARTRIDGE, GEORGE E. *Genetic Philosophy of Education.* New York, Macmillan, 1912. 3, 23, 43, 510.

PASTEUR, LOUIS. (Inscription Over His Tomb.) 507.

PATRI, ANGELO. *A Schoolmaster of the Great City.* New York, Macmillan, 1922. 421.

PATRICK, GEORGE T. W. *Introduction to Philosophy.* Boston, Houghton Mifflin, 1924. 57, 106.

PATTEN, SIMON N. *Heredity and Social Progress.* New York, Macmillan, 1903. 246.

PAULSEN, FRIEDRICH. *Introduction to Philosophy* (Thilly Translation). New York, Holt, 1895. 47.

PAULSEN, FRIEDRICH. *System of Ethics* (Thilly Translation). New York, Scribner, 1899. 265.

PAYNE, JOSEPH. *Lectures on the Science and Art of Education.* New York, Kellogg, 1887. 6.

PAYNE, WILLIAM HAROLD. *Contributions to the Science of Education.* New York, American Book Co., 1886. 113, 511.

PAYNE, WILLIAM HAROLD (translator). *See* Rousseau, J. J., *Emile.*

PERRY, RALPH BARTON (joint author). *History of Philosophy.* New York, Scribner, 1925. 71.

Perry, Ralph Barton. *Present Philosophical Tendencies.* New York, Longmans, 1929. 73, 75, 95, 258, 283, 325, 354, 555.

Peters, Charles C. *Foundations of Educational Sociology.* New York, Macmillan, 1927. 285.

Phillips, Daniel Edward, in *Journal of Educational Psychology.* 463.

Pittenger, Benjamin Flood, in *Journal of Education.* 54.

Plato. *Laws* (Jowett Translation). 17, 28, 177, 484.

Plato. *Republic,* in *Barnard's American Journal of Education.* 389.

Poincaré, Henri. *Science and Method.* New York: Science Press. 387.

Poole, William C., in *International Journal of Religious Education.* 564.

Popenoe, Paul Bowman. *The Child's Heredity.* Baltimore, Williams & Wilkins, 1929. 220.

Pratt, James Bissett. *What Is Pragmatism?* New York, Macmillan, 1909. 97.

Proctor, William Martin. *Educational and Vocational Guidance.* Boston, Houghton Mifflin, 1925. 168, 473.

Progressive Education. Washington, Progressive Education Association. 431, 442, 461.

Progressive Teacher, The. 37.

Quick, Robert Herbert. *Educational Reformers.* New York, Appleton, 1890. 33, 378.

Quick, Robert Herbert. *Life and Remains* (Storr, editor). New York, Macmillan, 1899. 403, 406, 407, 552.

Quick, Robert Herbert. *Locke on Education.* Cambridge, University Press, 1884. 8.

Quintilian. *Institutes of Oratory* (Butler Translation). New York, Putnam, 1921. 390.

Raup, Robert Bruce, in *Child Study.* 287.

Religious Education. Chicago, Religious Education Association. 87, 310, 351.

Robinson, James Harvey. *The Mind in the Making.* New York, Harper, 1921. 160.

ROSENKRANZ, KARL. *Philosophy of Education.* New York, Appleton, 1903. 39, 270, 482.

ROSS, EDWARD ALSWORTH. *Outlines of Sociology.* New York, Century, 1923. 157.

ROSS, EDWARD ALSWORTH. *Principles of Sociology.* New York, Century, 1924. 207, 290.

ROUSSEAU, JEAN JACQUES. *Emile* (Worthington Translation). Boston, Heath, 1883. 84, 162.

ROUSSEAU, JEAN JACQUES. *Emile* (Payne Translation). New York, Appleton, 1914. 393.

ROWE, STUART HENRY. *Habit Formation and the Science of Teaching.* New York, Longmans, 1909. 5, 229, 320.

ROYCE, JOSIAH. *The Spirit of Modern Philosophy.* Boston, Houghton Mifflin, 1892. 42, 568.

RUEDIGER, WILLIAM CARL. *Principles of Education.* Boston, Houghton Mifflin, 1909. 164, 370.

RUSK, ROBERT ROBERTSON. *Philosophical Bases of Education.* Boston, Houghton Mifflin, 1929. 76, 98, 107, 117, 549.

RUSKIN, JOHN. *Sesame and Lilies.* New York, Mershon (no date). 35, 477.

RUSSELL, BERTRAND. *The Problems of Philosophy* (The Home University Library of Knowledge). New York, Holt, 1912. 60, 66.

SABIN, HENRY. *Common Sense Didactics for Common School Teachers.* Chicago, Rand McNally, 1903. 411.

SADLER, MICHAEL ERNEST (editor). *Moral Instruction and Training in Schools.* New York, Longmans, 1908. 533.

ST. PAUL. 136.

SANDIFORD, PETER. *Educational Psychology.* New York, Longmans, 1929. 336, 430.

SCHAEFFER, NATHAN C. *Thinking and Learning to Think.* Philadelphia, Lippincott, 1906. 126, 394.

SCHILLER, FERDINAND C. S. *Humanism.* London, Macmillan, 1912. 94.

School and Society. Lancaster, Pa., The Science Press. 505.

SCHWEGLER, ALBERT. *History of Philosophy* (Seelye Translation). New York, Appleton, 1905. 62.

SEELYE, JULIAN H. (translator). *See* Schwegler, Albert, *History of Philosophy.* 62.

SELLARS, ROY WOOD. *The Principles and Problems of Philosophy.* New York, Macmillan, 1926. 50.

SETH, JAMES. *A Study of Ethical Principles.* New York, Scribner, 1902. 198.

SHAKESPEARE, WILLIAM. *As You Like It.* 137.

SHAKESPEARE, WILLIAM. *Othello.* 127.

SILVER, ABBA HILLEL. *Religion in a Changing World.* New York, Smith, 1930. 541, 545.

SINCLAIR, MAY. *A Defence of Idealism.* New York, Macmillan, 1917. 102.

SMITH, WILLIAM (translator). *Fichte's Popular Works.* 141, 506, 542.

SMITH, WILLIAM HAWLEY. *All the Children of All the People.* New York, Macmillan, 1915. 296.

SNEDDEN, DAVID SAMUEL. *Educational Sociology.* New York, Century, 1924. 203.

SNEDDEN, DAVID SAMUEL. *The Problem of Vocational Education.* Boston, Houghton Mifflin, 1910. 478.

SOUVESTRE, EMILE. *An Attic Philosopher in Paris.* New York, Burt, 1912. 111, 262.

SPENCER, HERBERT. *Education.* New York, Burt (no date). 9, 359.

SPENCER, HERBERT. *Education.* Syracuse, Bardeen, 1894. 154, 518.

STARCH, DANIEL. *Educational Psychology.* New York, Macmillan, 1927. 230.

STEPHEN, SIR LESLIE. *The Science of Ethics.* New York, Putnam, 1907. 210.

STEVENSON, JOHN ALFORD. *The Project Method in Teaching.* New York, Macmillan, 1921. 382.

STORR, FRANCIS (editor). *See* Quick, R. H., *Life and Remains.*

STRAYER, GEORGE DRAYTON. *A Brief Course in the Teaching Process.* New York, Macmillan, 1913. 417.

STRAYER, GEORGE DRAYTON. *How to Teach.* New York, Macmillan, 1917. 218, 483.

STREETER, BURNETT HILLMAN. *Reality.* New York, Macmillan, 1929. 89, 147, 574.

Suggestions of Modern Science Concerning Education (a symposium). New York, Macmillan, 1917. 346, 469.

SULLY, JAMES. *The Teacher's Handbook of Psychology.* New York, Appleton, 1910. 342.

SWIFT, EDGAR JAMES. *The Mind in the Making.* New York, Scribner, 1909. 254, 307.

SYMONDS, PERCIVAL MALLON. *Measurement in Secondary Education.* New York, Macmillan, 1930. 451.

Teachers College Record. New York, Teachers College, Columbia University. 486.

TERMAN, LEWIS MADISON. *Measurement of Intelligence.* Boston, Houghton Mifflin, 1916. 452.

TERRY, PAUL WASHINGTON, in *Journal of Educational Research.* 454.

THAYER, VIVIAN TROW, in William H. Kilpatrick (editor), *The Educational Frontier.* New York, Century, 1933. 439.

THOMSON, JOHN ARTHUR. *Darwinism and Human Life.* London, Melrose, 1909. 225.

THORNDIKE, EDWARD LEE. *Education.* New York, Macmillan, 1914. 30.

THORNDIKE, EDWARD LEE. *Educational Psychology.* New York, Teachers College, Columbia University, 1912. 165.

THORNDIKE, EDWARD LEE. *Educational Psychology: Briefer Course.* New York, Teachers College, Columbia University, 1917. 338.

THORNDIKE, EDWARD LEE. *Individuality.* Boston, Houghton Mifflin, 1911. 221.

THORNDIKE, EDWARD LEE, in National Society for the Study of Education, *Seventeenth Yearbook,* 1918. 447.

THORNDIKE, EDWARD LEE. *The Principles of Teaching.* New York, A. G. Seiler, 1914. 460.

THRASHER, FREDERIC M. *The Gang.* Chicago, University of Chicago Press, 1927. 253, 255.

THWING, CHARLES FRANKLIN. *What Education Has the Most Worth?* New York, Macmillan, 1924. 557.

TODD, ARTHUR J., in *Religious Education.* 310.

TODD, ARTHUR J. *Theories of Social Progress.* New York, Macmillan, 1918. 196, 284.

TOMPKINS, ARNOLD. *Philosophy of School Management.* Boston, Ginn, 1903. 426, 438.

TRACY, FREDERICK. *The Psychology of Adolescence.* New York, Macmillan, 1920. 149, 268, 337, 352.

TUFTS, JAMES HAYDEN (joint author). *Ethics.* New York, Holt, 1908. 259.

TYLER, JOHN MASON. *Growth and Education.* Boston, Houghton Mifflin, 1907. 470.

UHL, WILLIS L. *The Supervision of Secondary Subjects.* New York, Appleton, 1929. 158, 444.

U. S. OFFICE OF EDUCATION. *Cardinal Principles of Secondary Education.* Bulletin 35, 1918. 494.

VAN DYKE, HENRY. *Essays in Application.* New York, Scribner, 1905. 495.

WALLAS, GRAHAM. *Our Social Heritage.* New Haven, Yale University Press, 1921. 247, 380.

WARD, JAMES. *Naturalism and Agnosticism.* London, Black, 1915. 314, 316.

WARD, LESTER FRANK. *Applied Sociology.* Boston, Ginn, 1906. 248, 250.

WASHBURNE, CARLETON WOLSEY, in a pamphlet, *Recent Developments in the Winnetka Schools* (1935). 457.

WATSON, JOHN. *Selections from Kant.* New York, Macmillan, 1894. 508.

WATSON, JOHN BROADUS. *Psychology from the Standpoint of a Behaviorist* (Second Edition). Philadelphia, Lippincott, 1924. 347.

WATSON, JOHN BROADUS, in *Suggestions of Modern Science Concerning Education.* New York, Macmillan, 1917. 346.

WATTS, ISAAC. *Works of Isaac Watts,* quoted in Betts, *The Curriculum of Religious Education.* 521.

WEBER, ALFRED. *History of Philosophy.* New York, Scribner, 1896. 63, 71.

WEISS, ALBERT PAUL. *A Theoretical Basis of Human Behavior.* Columbus, Ohio, R. G. Adams, 1929. 53, 334, 345.

WELLS, HERBERT GEORGE. *The Salvaging of Civilization.* New York, Macmillan, 1921. 211.

WELLS, HERBERT GEORGE. *The Story of a Great Schoolmaster.* New York, Macmillan, 1924. 306.

WHITE, EMERSON ELBRIDGE. *Elements of Pedagogy.* New York, American Book Co., 1886. 450, 455.

WHITEHEAD, ALFRED NORTH. *Adventures of Ideas.* New York, Macmillan, 1933. 184, 215, 305.

WHITEHEAD, ALFRED NORTH. *The Aims of Education.* New York, Macmillan, 1929. 179, 282, 326.

WHITEHEAD, ALFRED NORTH. *Science and the Modern World.* New York, Macmillan, 1926. 308.

WHITLEY, MARY THEODORA (joint author). *The Psychology of Childhood.* New York, Macmillan, 1918. 234, 467, 559.

WICKERSHAM, JAMES PYLE. *Methods of Instruction.* Philadelphia, Lippincott, 1866. 142, 153.

WIGGAM, ALBERT EDWARD. *The Fruit of the Family Tree.* Indianapolis, Bobbs-Merrill, 1924. 212, 239.

WIGGAM, ALBERT EDWARD. *The New Decalogue of Science.* Indianapolis, Bobbs-Merrill, 1923. 116.

WILLIAMS, JESSE FEIRING. *The Principles of Physical Education.* Philadelphia, W. B. Saunders, 1927. 474.

WILSON, WOODROW. *Selected Literary and Political Papers and Addresses.* New York, Grossett & Dunlap, 1925. 492.

WILSON, WOODROW. *The State.* Boston, Heath, 1907. 309, 501.

WINCHELL, ALEXANDER. *Sketches of Creation.* New York, Harper, 1870. 570.

WINCHELL, ALEXANDER. *Sparks from a Geologist's Hammer.* Chicago, Griggs, 1881. 513.

WINSHIP, ALBERT EDWARD, in *Journal of Education.* 497.

WOOD, HERBERT GEORGE. *Christianity and Communism.* New York, Round Table, 1933. 536.

WOODWARD, WILLIAM HARRISON. *Vittorino da Feltre and Other Humanist Educators.* Cambridge University Press, 1921. 397.

WORTHINGTON, ELEANOR (translator). *See* Rousseau, J. J., *Emile.*

YOCUM, ALBERT DUNCAN. *Culture, Discipline and Democracy.* Philadelphia, Christopher Sower, 1913. 176.

Subject Index

(Numbers refer to excerpts)

A

Ability:
  difficulty in determining, 254
  our unused talents, 260
  standard for should be raised, 223
  training for, 177
Ability, Testing, assumptions implied in, 445
Achievement, measurement of, 444
Adams, D. K., and Thorndike's theory of adaptation, 332
Adams, James, quoted, 463
Administration of school systems:
  authority for from state, 429
  curriculum as an element, 430
  distinctive function of, 441
  fundamental law of, 426
  good, 437
  in relation to individual differences, 432
  See also School management and organization; Supervision (in education).
Adults, differences from and identities to children, 337
Aeschylus, on fate, 187
Agassiz, referred to, 51, 551
Alexander of Macedon, his debt to Aristotle, 397
Anarchism *vs.* socialism, 192
Animals and environment, 240
Animism and mechanistic interpretation of conscious behavior, 353
Application, J. S. Mill on, 384
Aristotle:
  and individual interests, 187
Aristotle (*Continued*):
  and moral development, 180
  on organization and nature of philosophy, 59
  on the work of education, 36
  quoted, 109, 532
  referred to, 93, 97, 397, 533
Arnold, Matthew:
  hopelessness of naturalism, 79
  referred to, 57
Arnold, Thomas:
  and spirit of the teacher, 423
  influence of on theory, 170
  method of, 377
Atheism not normal, 557

B

Babson, Roger, conversation with Steinmetz, 310
Bacon, Francis, quoted, 354
Bain, Alexander, referred to, 423
Balance, principle of, 207
Ballard Memorial School, 439
Beethoven, Ludwig van, 260
Behavior:
  a unified totality, 335
  and consciousness, 334
  conscious, 353
  influence of books and newspapers on, 255
  problems of, 341
Behaviorism:
  and metaphysics, 53
  and thinking, 347
  as methodology, not philosophy, 348
  claim of, 345
  examination of, 332

Belief, theory must correct and enlighten, 283
Bergson, Henri, referred to, 95
Berkeley, George, referred to, 105, 327
Bible, living truths of, 561
Binet scale, 462
Books, influence of on behavior, 255
Booth, Meyrick, quoted, 332
Breal, Michel, visit to Pestalozzi, 377
Brentano and act school, 351
Brinkley, S. G., on examinations, 444
Brontë, Emily, 516
Brooke, Van Wyck, quoted, 486
Browne, Sir Thomas, 239
Buckle, T. H.:
  belief in unlimited powers of education, 222
  on influence of physical nature on history, 267
Burbank, Luther, referred to, 234
Bury, J. B., on history as a science, 463
Business, employer and human betterment, 212
Butler, Nicholas M., quoted in introduction of Chapter XXIII
Byron, Lord, referred to, 254

C

Carlyle, Thomas, on the "Worship of Sorrow," 567
Carnegie foundation, athletics investigated by, 463
Cartesian philosophy, 314
Caste system in India, 543
Causality as a condition of experience, 319
Centralization *vs.* individualism, 204
Chapman-Sims socio-economic scale, 462
Character:
  an ideal of education, 175
  and habit, 537
  objective and subjective part of, 523
  points of a good, 534
  relation to philosophy of life, 515
  seed-time of, 157
  See also Moral education: Morality.
Character building, Webster on, 529
Character education (*see* Moral education)
Charity:
  existing type dysgenic, 226
  St. Paul on, 136
Charters, W. W., and functional view to methods, 375
Chesterton, G. K., quoted by James, 44
Chicago Association of Commerce, 439
Chicago (University) school of pragmatism, 92
Children:
  as behaving organisms, 93
  as old as the race, 219
  differences from and identities to adults, 337
  religious heritage of, 566
  religious nature of, 559
Choice:
  a necessity, 273
  and heredity and environment, 240
Christ (*see* Jesus Christ)
Christian education discussed, 554 (*see also* Character; Moral education; Morality; Religious education)
Christianity:
  and Platonism, 543
  and sense of personal worth, 536
Church, educative effect of, 38 (*see also* Religious education)

Citizenship:
  education and, 175, 484
  four marks of education for, 489
Civilization:
  and science, 310
  crucial problem of modern, 485
  result of man's activities, 250
Clapp, Elsie, and Ballard Memorial School, 439
Clarke, Samuel, *vs.* atheism, 354
Comenius, referred to, 427
Competition intolerable as an educational ideal, 167
Condorcet, referred to, 119
Conduct:
  and conviction, 512
  knowledge functions in, 511
Confucius, sayings of, 138
Consciousness:
  and behavior, 334
  in behavior, 353
Conviction and conduct, 512
Corporal punishment (*see* Punishment, Corporal)
Cosmology, the new, 82
Counts, G. S., "School and society in Chicago," 439
Course of study (*see* Curriculum)
Crime and education and social progress, 256
Culture:
  an ideal of education, 175
  as a way towards equality, 292
  nature of, 491
  pragmatism in relation to, 98
  the pursuit of perfection, 487
Curriculum:
  a practical working tool, 365
  a set of experiences, 355
  and social life, 369
  and social philosophy, 360
  as controlled experience, 371
  as task of administrators, 430
  broader interpretation of necessary, 367
  function of discussed, 354-373 (Chapter XV)
Curriculum (*Continued*):
  fundamental problem in education, 363
  in an acceptable program of education, 356
  permanent and changing values in, 370
  the new and the old, 366
  what it involves, 361
Curriculum construction:
  a matter of philosophy, 357
  and aims of life and education, 373
  and educational reorganization, 358
  on a life basis, 372
  principle of parallelism in, 364
  See also Curriculum.
Cuvier, referred to, 260, 551

D

Darwin, Charles:
  on will, 269
  referred to, 254, 260
Democracy:
  aims of education in, 168
  and educated people, 499
  and human rights, 492
  individual and society in, 494
  true ideal of education in, 495
  See also Democratic education.
Democratic education:
  aim of, 498
  and public schools, 254
  test of, 528
Development an ideal of education, 175
Dewey, John:
  influenced theory, 170
  on experience, 311
  on school, 284
  referred to, 92, 104, 121, 375
Differences, Individual:
  in relation to administration, 432
  steps in program for provision of, 457
  teachers' recognition of, 413

Discipline:
  an ideal of education, 175
  Plato on, 389
  record of a Swabian schoolmaster on, 392
  Steele on, 413
  See also Punishment, Corporal.
Disorder, Social, and education, 486
Donatello, referred to, 516
Duty of man, 132

E

Ecclesiastes, 77
Economic system: the businessman and human betterment, 212
Eddington, A. S., 87
Educated person, ideally, 155
Education:
  a change in man himself, 338
  a good, 28
  a natural process, 14
  aim of all well-directed, 153
  aim of in a democracy, 168
  aims of discussed, 149-181 (Chapter VII)
  aims of in light of history, 175
  and complete living, 359
  and crime and social progress, 256
  and environment, 84, 243
  and heredity, 235
  and human beings, 165
  and life, 30, 35
  and man, 84
  and mental capacity, 231
  and moral life, discussed, 506-537 (Chapter XXII)
  and nature, 84
  and psychology, discussed, 328-353 (Chapter XIV)
  and religious life, discussed, 538-575 (Chapter XXIII)
  and social disorder, 486
  and social progress, discussed, 282-310 (Chapter XII)
Education (*Continued*):
  Aristotle on, 16
  as adjustment, 164
  as conscious evolution, 3
  as reconstruction, 7
  as world building, 2
  central problem in, 216
  chief end of, 211
  chief problem of, 304
  concepts of discussed, 1-40 (Chapter I)
  contrasting views on, 295
  definition of, 4-6, 11-13, 15, 18-19, 21, 24-25, 29, 31-32, 39-40, 241
  democratic aim of, 498
  essence of, 179
  ethical in aim, 163, 526
  for continued growth, 286
  for directed self-preservation, 154
  function of, 9, 37, 152
    Aristotle on, 36
    Emerson on, 22
  generalization in, 333
  how a social force? 284
  ideal, 171
  inseparable from religion, 558
  liberal, 20, 27
  Luther on need of, 288
  main aim in, 150, 181
  Mill's definition of, 241
  morality highest aim of, 535
  natural, 14, 86
  naturalism in, 76
  nature of, 41
    Plato on, 17
  not transmission of settled culture, 287
  principles of, 56
  problem of, 23
  religious phase and content of, 548
  responsible for progress, 303
  social demands upon, 504
  social efficiency the standard, 362
  supreme aim of, 170
  tasks of, 10

Education (*Continued*):
  the development of personality, 1, 246
  the new, 33
  the true end of all, 149
  universal, 26, 289
  useful, Locke on, 8
  without religion, 556
  See also Democratic education; Christian education; Moral education; Nursery education; Religious education; Vocational education; and other items throughout index.
Education, Character (*see* Moral education)
Education, Democratic (*see* Democratic education)
Education, Moral (*see* Moral education)
Education, Philosophy of:
  concepts of, 42-70 (Chapter II)
  the question of, 68
  the soundest, 209
Education, Secondary:
  ideal of, 178
  three fundamental aims of, 174
Education, Support of, essential nature of problem, 428
Education for efficiency:
  an ideal, 175
  discussed, 464-483 (Chapter XX)
  Eliot on, 464
Efficiency, Social, a standard for education, 362
Einstein, Albert, referred to, 87
Ellis, Havelock, 463
Ellwood, C. A.:
  on education as a social force, 284
  quoted, 300
Emergent evolution, relation to scientific method, 114
Emerson, R. W.:
  on teachers, 412
  referred to, 552
Ends, rule of, 119
English schools and religious education, 552
Environment:
  adaptation of animals to, 240
  and education, 84, 243, 263
  and experience, 316
  and heredity, 224, 240, 267
  and physical deficiency, 302
  and will, 267
  influence on state of, 502
  need of modifying, 308
  the social, 241, 251
Ephesians, 525
Epictetus, referred to, 533
Epicurus on philosophy, 69
Equality, men of culture true apostles of, 292
Ethics:
  morality more than action, 509
  the bottom fact of, 129
  See also Morality; Will.
Eugenics:
  aid to social inheritance, 224
  the world question, 237
  way to improve race, 232, 239
Euripides and fate, 187
Evolution:
  social, methods of, 300
  theory of, 551
  See also Emergent evolution.
Existence, realities of, 115
Experience:
  a three-fold division of, 316
  a world of personality, 312
  always a unity, 314
  as conscious awareness, 320
  concepts of, 311-327 (Chapter XIII)
  conditions of, 319
  definition of, 311, 323
  inclusion of active and passive elements by, 318
  interpretation of by psychology, 331
  mind the most direct thing in, 315
  must be particular, 321
  sense and the unseen world, 313

Experience (*Continued*):
  uniformity of texture of, 316
  universe of, 327
Experience and science, Aristotle on, 322
Experimentalism a type of pragmatism, 92
Externalism, Christ and, 81
Extra-curricular activities fostered by social agencies, 439

F

Family:
  educative effect of, 38
  need to preserve, 195
Faraday, Michael, referred to, 148, 260
Fascism as way out of economic chaos, 287
Folkways, education in, 252
Force incompatible with a social life, 308
4-H club, pledge of, 194
Franklin, Benjamin, referred to, 148
Freedom:
  and ideals, 271
  and individual repression, 184
  J. S. Mill on, 496
  positive and negative, 258
  under law, 206
French Revolution, rationalism oi, 536
Freudian psychology referred to, 332
Froebel, Friedrich:
  influence on theory, 170
  method of, 377
Fuller, quoted, 422
Fulton, Robert, referred to, 254

G

Galileo, referred to, 148
Gangs, factors underlying, 253
Garfield, James A., referred to, 150
Gauguin, referred to, 516
Gauss, K. F., referred to, 260
Geography, a first lesson in, 388
Germ-cells, the persistence of, 220
German schools and religious education, 552
Germany, educational aims in imperialistic era, 168
Gesell, Arnold, on achievement of children, 461
Gestalt psychology:
  explanation of, 330
  school of, 351
Gobineau, Le Compte de, on inherent differences in mental make-up, 222
God and scientific determinism, 538
Goethe:
  "Faust," 551
  referred to, 254
Goldsmith, Oliver, referred to, 254
Goodness for own nature's sake, 146
Government:
  and the individual, 189
  historical continuity of its actions, 309
  types of, 192, 287
Gray, Asa, referred to, 51, 551
Greece, Ancient, and individuality, 187
Guarino da Verona, on choice of a master, 397

H

Habit:
  how to make or break, 537
  men made good and virtuous by, 36
  modification of, 229
Happiness:
  and good, 141
  definition of, 135
  sources of, 507
Hauberle, schoolmaster, record on discipline, 392

Health:
  a school responsibility, 467, 470
  education in principles of, 473
  See also Physical education.
Hegel:
  on progress, 284
  referred to, 327
Hegelian thesis, 187
Heraclitus, quoted, 104
Herbart, Johann Friedrich:
  and moral development, 180
  influenced theory, 170
  referred to, 311, 375
Heredity:
  and education, discussed, 218-240 (Chapter IX), 263
  and environment, 224, 240, 267
  and progress, 236
  variation in human equipment, 230
Heredity, Social:
  adapted to present needs, 247
  as a factor in education, 241-256 (Chapter X)
  social organism and acquired characteristics, 249
  the curriculum the epitomized representation of, 369
  vs. physical heredity, 244
  See also Heredity.
Hermodorus, 525
Hi-school press association, 439
Hocking, W. E., quoted, 330
Home, safety of, 245
Honesty a condition of co-operation, 147
Horn, E., quoted, 375
Hoyland, J. S., quoted, 313
Human nature (*see* Nature, Human)
Human rights and democracy, 492
Humanism:
  a type of pragmatism, 92
  defense of the new, 94
  logical outcome of, 102
Hume, David, referred to, 327
Hunter, John, referred to, 254
Hyde, W. D., quoted on science and control of life, 463

I

Idealism:
  all aspects of life recognized by, 117
  and materialism, 106
  definition of, 105
  education from point of view of, 108
  ideal is real, and the real ideal, 120
  in education, 34, 105-122 (Chapter V)
  practical results of, 116
  satisfactory basis of education, 107
  values recognized in, 109
Ideals:
  and freedom, 271
  national, 301
  potency of, 112, 113
  value given to life by, 125
Ideas, power of, 113
Imagination in social life, 196
Immortality, 574
Impression as phase of aim, 176
India, and personal worth, 536
Indians of North America on education, 295
Individual (human):
  end of endeavor, 197
  in a democracy, 494
  makes his character and condition, 262
  must finish himself, 280
  one with society, 324
  See also Individual and society.
Individual and society:
  and Christianity, 536
  conflict of, 183, 187, 198, 202-204
  discussed, 182-217 (Chapter VIII)
  historical survey of, 187
  relation of, 186, 191, 205, 214

Individual and society (*Continued*):
  repression and freedom of each other, 184
  social whole and organic unity, 208
  social milieu and personal experience, 185
  two aspects of life, 193
Individual differences (*see* Differences, Individual)
Individualism:
  necessary for human progress, 190
  source of man's power, 259
  vs. centralization, 204
Infancy, meaning of, 227
Inheritance (*see* Heredity; Heredity, Social)
Instincts:
  definition of, 229
  modification of, 236
Institutions that educate, 38
Instrumentalism (*see* Pragmatism, Biological)
Integration (of personality), training for, 380
Intellect, necessity of nourishing, 530
Intelligence:
  measurement of, 445, 452
  modification of, 236
  training of, 282
Interest, problems of, 383
Intuition, discovery by, 387
Isocrates, objectives of, 158

J

James, William:
  on pragmatism, 95, 97
  on unused talents, 260
  quoted, 101
  referred to, 45, 92, 94
  "Will to Believe," 97
Jesus Christ:
  and Christianity, 544
  and externalism, 81
Jesus Christ (*Continued*):
  and modern science, 148
  as teacher, 425
  pace of progress set by, 214
  referred to, 126
  teachings of, 217, 574
  world-view of, 134
Johnson, Samuel, referred to, 254
Jukes family, 243
Jungle, law of, 199
Justice a condition of co-operation, 147

K

Kallias, referred to, 322
Kant, Immanuel:
  on experience, 326
  on human problem, 10
  on supreme law of pure practical reason, 508
  on universe of experience, 350
  referred to, 67, 71, 97, 121, 314, 327, 533
Khayyam, Omar, 131
Kilpatrick, W. H., on method, 375
Kipling, R., law of the jungle, 199
Knowledge:
  an ideal of education, 175
  and philosophy, 96
  and transfer of identical elements, 343
  functions in conduct, 511
  heading toward a non-mechanical reality, 78
  limitations of, 162
  linked with life, 382
  natural, 83
Koffka, K., on Gestalt psychology, 351
Köhler, W.:
  on animal psychology, 332
  on Gestalt psychology, 351

L

Langford, H. D., on educational service, 439

Lashley, K. S., reflex-action theory rejected by, 332
Law of unity fundamental, 426
Leadership a need in education, 427
Learning:
  a psychological experiment and conclusion, 346
  by doing, 379
  forms of and mental changes in, 339
  Plato on, 389
  pleasantness in, 378
Leibniz, referred to, 71, 314
LeRoy, Julian, referred to, 95
Lewes, G. H., referred to, 97
Liberalism as way out of economic chaos, 287
Liberty (*see* Freedom)
Life:
  a self-evolving circle, 144
  a train of moods, 143
  a warfare and a pilgrimage, 145
  and religion, 549
  five principles of, 124
  philosophy and, 70
  philosophy of, 173, 515
  value given by ideals, 125
  values discussed, 123-148 (Chapter VI)
  worth living, 126
Lindsey, Judge Ben, 463
Linnaeus, referred to, 254
Living:
  art of, 142
  preparation for, 169
  thoughtful, 139
Locke, John:
  on social contract, 538
  referred to, 67, 105, 314
Logic, we prove by, 387
"Logic chopping," 97
Lowell, James R., "Longing," 112
Luther, Martin:
  and religious education in Germany, 552
  pace of progress, set by, 214
Lyell, Sir Charles, referred to, 551

M

McDougall, William, on mental processes, 351
Mach, Ernst, quoted, 87
McMurry, Charles, referred to, 375
McMurry, F. M., influence on public school practice, 375
Malebranche, N., quoted, 551
Man:
  a greater mankind latent in, 306
  and education, 84
  and factor of heredity in, 222
  as an animal, 242
  more than a beast, 77
  must be useful, 465
  perpetuates himself, 111
  sources of his power, 259
  vocation of, 506
  whole duty of, 132
  worthy of honor, 130
Mann, Horace:
  and corporal punishment, 404
  referred to, 423
Marks, school, importance of, 458
Martineau, Harriet, referred to, 254
Marxism and Christianity, 536
Mateer, F., work with feebleminded, 336
Materialism:
  a false creed, 91
  and idealism, 106
  influence of, 85
  See also Naturalism.
Matter, geologist's reflection on, 570
Mazzini, G., on duties of man, 536
Measurement in education:
  and in life, 453
  and school publicity, 456
  discussed, 443-463 (Chapter XIX)
  elements of a philosophy of, 443
  importance of teacher's judgment in, 458
  indispensable to educator, 461

Measurement in education (*Continued*):
  judgment in interpretation of, 446
  may be deadening and fruitless, 459
  nature of, 447
  necessary, 448, 451, 460
  of accomplishment, 444
  of hereditary and environmental factors, 462
  purpose of, 449
  use and abuse of, 450
  uses and values of, 455
Mechanism, concept of, 82, 87
Mental capacity:
  and education, 231
  training to limit of, 493
Mental tests (*see* Measurement in education)
Metaphysics:
  a behaviorist on, 53
  See also Philosophy.
Method (in education):
  based on nature of child, 391
  discussed, 374-396 (Chapter XVI)
  elucidating complex problems, 394
  freshness of mind in, 377
  general theories of, 375
  means to an end, 395
  narrow and wider sense of, 374
  Quintilian on, 390
  wider problem of, 381
Method, Scientific, 114
Michelangelo, referred to, 516
Middletown, education in, 503
Mill, J. S.:
  belief in unlimited powers of education, 222
  education defined by, 241
  on application, 384
  on liberty, 496
Millikan, Robert A., quoted, 575
Mind, its own place, 123
Montesquieu, on doctrine of climates, 267
Moore, A. W., referred to, 103
Moral act, discussed, 522
Moral beauty, 513
Moral character as aim of education, 180
Moral education:
  consistency in training, 518
  creating a way of living, 156
  discussed, 524, 533
  in a changing world, 520
  method of, 514, 531, 532
  problem of, 527
  test of a democracy, 528
  vital and difficult, 510
  See also Discipline; Education; Morality.
Moral life:
  a divine discipline, 517
  in a two-storied house, 516
  virtues of can be taught, 519
Morality:
  discussed, 533
  highest aim of education, 535
  man's idealism as the constructive force of progress, 297
  means more than action, 509
Motivation, necessity for, 396

N

Name, value of a good, 127
Natural order, rule of, 119
Natural propensities difficult to force, 233
Naturalism:
  cause of pessimism, 79
  consequences of materialistic, 571
  definition of, 72-73
  in education, discussed, 71-91 (Chapter III)
  in its modern historical setting, 71
  in psychology and education, 76
  negations of, 74
  two varieties of, 75
Nature:
  and education, 84
  and experience, 316

Nature (*Continued*):
  Aristotle on, 36
  communion with, 137
  knowledge of, 83
  method of, 393
Nature, Human:
  and nurture, 225
  unchanged, 228
Nervous system the child's inheritance, 218
Newspapers, influence on behavior, 255
Newton, Isaac, referred to, 254, 260, 327
Newtonian conception of the universe, 350
Niemeyer, concept of education, 15
Nonconformism in action, 276
Nursery education a training for work of after life, 177

O

Objective tests, 454
Objectives of education historically considered, 158
Obligation, unconditioned, 121
Omar Khayyam, his philosophy, 131
Opportunity, need of equal, 248
Organism:
  and environment, 90
  concept of, 82
  conscious, 90
Ostwald, W., quoted by James, 97
Owen, Robert, referred to, 423

P

Papini, Giovanni, referred to, 95
Parallelism in curriculum construction, 364
Pasteur, Louis, referred to, 119, 148, 260
Pavlow, I. P., conditioned reflex, 332, 336
Pericles and recognition of the individual, 187
Person:
  distinction between an organism and, 90
  See also Individual (human).
Personal worth, sense of, 536
Personality:
  development of, 155
  in social life, 200
  of teachers, 410
Pessimism, naturalism a cause of, 79
Pestalozzi:
  method of, 377
  referred to, 423
Philosophy:
  and knowledge, 96
  concepts of, 42-70 (Chapter II)
  definition of, 44, 49, 57, 58, 61
  in curriculum construction, 357
  less popular than science, 325
  need of, 65
  origin and nature of, 59
  role of in the new society, 294
  teacher of, 52
  the method of, 51
  the thinking attitude, 45
  value of, 66
  See also Science and philosophy.
Philosophy of education (*see* Education, Philosophy of)
Physical education, purpose of, 474
Physics, modern, 88
Physiology and psychology, 328, 349
Plato:
  and individual worth, 187
  on corporal punishment, 404
  on learning by compulsion, 389
  on philosophers, 294
  referred to, 58, 67, 104, 113, 215, 427, 533, 551
  theory of ideas, 311
Play:
  and child development, 469
  and mental effort, 471

Play (*Continued*):
  distinguished from work, 482
  for every child, 480
  in education, 476
  meaning of in education, 483
  problem of, 479
  seriousness of, 472
  Watts on child's love of, 521
Poincaré, Henri, quoted, 87
Pope, Alexander, quoted, 79
Population, growth of, a world question, 237
Pragmatism:
  and the spirit of the age, 95
  ethics of, 100
  in education, discussed, 92-104 (Chapter IV)
  in relation to culture, 98
  inadequate, 103
  logical outcome of, 102
  main principle of, 101
  method of, 97, 99
  truth of, 104
  types of, 92
Pragmatism, Biological, 92
Pragmatism, Nominalistic, 92
Principles, consequences of, 553
Progress:
  and education, discussed, 282-310 (Chapter XII)
  and education and crime, 256
  depends on education, 303
  discussed, 298
  education chief factor in, 299
  need of variation, 307
  preventives of ossification, 290
  some requisites for, 308
  See also Change; Eugenics: Leadership.
Progressive education, a parent's protest, 442
Progressive theories contrasted with stalwart doctrines, 256
Project method in education:
  limitations of, 386
  one requirement of a real project, 385
Protagoras:
  referred to, 104
  saying of, 94
Psychology:
  and conscious experience, 331
  and education, 328-353 (Chapter XIV)
  and physiology, 328, 349
  an independent science, 350
  conflicting schools of, 330
  experimental, 340
  in all man's activities, 329
  mechanistic form examined, 332
  naturalism in, 76
  need for, 342
  of social science, 182
  scientific, 351
  See also Behavior; Behaviorism; Gestalt psychology; Response, conditioned.
Public education, aims of American, 166
Public schools:
  and society, 296
  manifest democracy at work, 488
  problems of democracy centered in, 497
  religion in, 552
  See also Education.
Punishment, Corporal, contrary to spirit of liberty, 404
  See also Discipline.
Pupils:
  and activities, 356
  and school marks, 458
Purpose, concept of, 82

R

Rabelais on "honor," 256
Reality:
  ideal is real, and the real ideal, 120
  ultimate, 122
Reason:
  Aristotle on, 36
  Kant on, 508

Records, school, 431
Reflex, conditioned, 332
Religion:
  an ever-progressing tendency, 565
  and life, 549
  and society, 542
  and the modern world, 564
  complications in, 573
  dynamic in man, 572
  education and, 172
  experience the basis of, 544
  if omitted in education, 556
  in public schools, 552
  influence of example in, 569
  inseparable from education, 558
  no rival of science, 541, 563
  values of, 545
Religious education:
  as essence of education, 179
  curriculum of, 360
  meaning of spirit and, 550
  principles of, 539
  responsibility of the church for, 540, 546, 547
Religious life and education, discussed, 538-575 (Chapter XXIII)
Response, conditioned, a triumph for experimental psychology, 336
Ribot, quoted, 267
Rome, Ancient, and individuality, 187
Rousseau, J. J.:
  and the French Revolution, 427
  objections to his theory of teaching religion, 562
  on education as a natural process, 14
  on social contract, 536
Rural schools and out-of-school interests, 439
Rush, Benjamin, on corporal punishment, 404, 423
Ruskin, John, quoted, 232
Russell, Bertrand:
  on marriage, 332
  on truth, 121

S

St. Augustine on moral life, 516
Sanderson, F. W., 306
Sanitation (*see* Health)
Satisfaction and unconditioned obligation, 121
Schiller, F. C. S.:
  and humanism, 92
  and pragmatism, 95
School:
  a living agency, 412
  a socializing institution, 180
  as an organism, 249
  educative effect of, 38
  idea which originates, 426
  Luther on need of, 288
  steering gear of a democratic society, 293
  traceable to religious influences, 560
  See also Education; Public schools; Rural schools.
School-houses, Mann on, 435
School management and organization:
  administrator and outside social agencies, 439
  discussed, 426-444 (Chapter XVIII)
  distinctive function of, 441
  teachers should have voice in, 436
  the work of experts in, 434
  See also Administration of school systems.
School records, 431
School system as an organism, 433
School systems, Administration of (*see* Administration of school systems)
Schoolmasters (*see* Teachers)
Schopenhauer on will, 269

Science:
  a limited body of truth, 555
  and civilization, 310
  and experience, 316
    Aristotle on, 322
  modern, and teaching of Jesus, 148
  more popular than philosophy, 325
  no rival of religion, 541, 563
  reveals only mysteries, 80
  what is scientific? 463
Science and mechanism, relation of, 89
Science and philosophy:
  in education, 67
  relation of, 46, 48, 55, 58, 60, 62-64, 80, 87
Scientific determinism, room for God left by, 538
Secondary education (*see* Education, Secondary)
Self:
  infinite, 568
  significance of idea of, 352
Self-control, 281
Self-determination, 270
Self-sacrifice:
  man's, 111
  progress the result of, 201
Seneca, 8
Seward, W. H., referred to, 254
Shaftesbury, Earl of, referred to, 533
Sheridan, Robert, referred to, 254
Sims socio-economic scale, 462
Social agencies and the school administrator, 439
Social disorder, 486
Social evolution as resultant of two factors, 188
Social heredity (*see* Heredity, Social)
Social life, theory and belief in relation to, 354
Social progress (*see* Progress)
Social reconstruction, methods of, 287
Social science, psychology of, 182
Socialism *vs.* anarchism, 192
Socialists, their remedies, 81
Society:
  and the curriculum, 369
  and the individual, 182-217 (Chapter VIII)
  educative effect of, 38
  factors which govern fate of, 305
  foundations of social reconstruction, 217
  importance of variation in, 307
  in a democracy, 494
  whole not deducible from sum of its parts, 210
Society and the individual (*see* Individual and society)
Socrates:
  and individual interests, 187
  method of, 377
  on conduct, 511
  referred to, 322, 425
Sophists, 311
Sophocles and fate, 187
Soviet Russia:
  child trained for welfare of state in, 168
  radicalism in, as way out of economic chaos, 287
Space as a condition of experience, 319
Sparta, Ancient, an individuality, 187
Spearman on animal psychology, 332
Spencer, Herbert:
  on science, 463
  quoted, 81
  referred to, 67
Spinoza:
  quoted, 167
  referred to, 119
Spirit, geologist's reflection on, 570
Spiritual values, belief in reality of, 575
Stanford achievement test, 462

State (nation), environmental influence of, 502
State and education:
  discussed, 38
  Wilson on, 501
State control of education an evil, 500
State support of education:
  a necessary service, 428
  right to maintain schools, 440
Steele, Sir Richard, on discipline, 413
Steinmetz, Charles P., conversation with Babson, 310
Stevenson, Robert L., referred to, 119
Streets, safety of, 245
Studies, Bacon on, 161
Study, Course of (*see* Curriculum)
Study for different types of tests, 454
Success limited by inheritance, 234
Supervision (in education), basis and limitations of, 438 (*see also* Administration of school systems; School management and organization)
Support of education (*see* Education, Support of)
Swift, Jonathan, referred to, 254
Sympathy a qualification of the teacher, 422

T

Taine, referred to, 267
Teachers:
  and the schools, 414
  as artists, 420
  bad, 407
  beatitudes of, 402
  choice of, 397
  important aim of, 417
  in touch with humanity, 421
  lives of others developed by, 418
Teachers (*Continued*):
  moral influences or disciplinarians, 419
  need of training, 409
  part in education, 238
  personality of, 410
  preparing fulfillment of future events, 405
  problems of, 408
  pupils helped in self-discovery by, 416
  qualifications of, 398
  Quick on types of, 403
  role of discussed, 397-425 (Chapter XVII)
  students of their calling, 400
  sympathy a qualification of, 422
  task of, 424
  training of, 399, 401
  See also Administration of school systems; School.
Teaching:
  in open air, 481
  is assisting learning, 415
  Kagawa's art of, 376
  made interesting, 384
  noble living as end of, 425
  not learned by demonstration, 399
  of morals, 514
  Pestalozzi's method of, 377
  the ideal way of, 411
  See also Curriculum construction; Education; Method (in education); Teachers.
Tests (*see* Measurement in education; Objective tests)
Theory in education, 505
Thinking (*see* Thought and thinking)
Thompson, Professor, quoted, 249
Thorndike, E. L.:
  referred to, 76, 375
  theory of adaptation, 332
Thought and thinking:
  behaviorist's conception of thinking, 347
  creative thought, 160

Thought and thinking (*Continued*):
  need of philosophic educational thinking, 54
  three stages of thought, 551
  training for a life of mental effort, 380
Time as a condition of experience, 319
Transfer of training:
  dependent on power of generalization, 344
  of small value, 430
  theory of identical elements, 343
Truth, ultimate, 110
Turkey, opening of new schools in, 505

U

Uniformity dangerous to progress, 308
United States of America:
  effects of culture on, 287
  public education in, 166, 256
University, purpose of, 159
Utilitarianism, 213

V

Vaihinger, referred to, 103
Values:
  and idealism, 109
  choice of, 140
  conserving of, 159
  man's struggles for, 77
  of man, 289
Variation, social, necessary for progress, 307
Virginia, education in 1744 in, 295
Vocation of man, 506
Vocational education:
  a profitable investment for society, 478
  and liberal culture, 468
  discussed, 475
  for every youth, 466
  result of being rightly occupied, 427
Voters, education to make fit, 490

W

Wallas, Graham, referred to, 249, 505
Watson, John B., on behaviorism, 332, 336
Webster, Daniel, on character building, 529
Weismann, August, on physical heredity, 236
Whitehead, A. N., referred to, 87
Will:
  and inheritance and environment, 267
  as a directing factor, 261
  as a factor in education, 257-281 (Chapter XI)
  as summation of what a man is, 277
  conformity of to laws of psychic action, 264
  emancipation and, 274
  function and importance of, 269
  importance of training, 272
  in education, 257, 263
  meaning and importance of, 268
  moral man the effect of, 266
  principles in educating, 532
  proper function of, 279
  the goal of, 265
  training of, 275
Wisdom, 128
Work:
  distinguished from play, 402
  in education, 476
Written exercises, importance of, 387

Y

Yerkes, Robert M., on animal psychology, 332

Z

Zeus and fate, 187

Date Due

~~NEW BOOK~~

~~RESERVE~~

O 26 '39

~~RESERVE~~

~~RESERVE~~

D 26 '41

O 21 '43

~~RESERVE~~

~~RESERVE~~

(But) Phil. of Educ.

Mr 28 '45

Ap 2 '45

JY 6 '48

DE 8 '52

DE 8 '52

~~JAN 7 '65~~

MAR 20 2018

LB7 .K95
A philosophy of education, based on
Princeton Theological Seminary–Speer Library
1 1012 00026 1802